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AD HOC Committee, Council of Teaching Hospitals of the Assn. of American Medical Colleges.

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Identifiers-\*Veterans Administration

To help with plans for developing all the health services personnel necessary to alleviate shortages of help for doctors and hospitals, this study has been undertaken. Veterans Administration hospitals were asked to report their potential for health services manpower training, taking advantage of the Manpower Development and Training Act and Economic Opportunity Act. Information appropriate to any local Veterans Administration hospital setting is tabulated for 36 professional and 80 nonprofessional probable training areas, with details such as target skill, prerequisites, course length, source of academic education, number of trainees per course with present and additional facilities, staff needs, equipment needs, space needs, tuition or stipend per trainee, certificate or degree at end of course, and source of recruitment. (jf)

**TRAINING AND EDUCATION OF  
HEALTH SERVICES PERSONNEL**

**PUBLIC LAW 89-785  
APRIL 1, 1967**

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
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SURVEY OF POTENTIAL FOR TRAINING,  
RETRAINING, AND EDUCATION OF  
HEALTH SERVICES PERSONNEL

PUBLIC LAW 89-785

APRIL 1, 1967

Prepared by Ad Hoc Committee - COTH  
of AAMC, "Implementation of Program  
for Training and Education of Health  
Services Personnel." Dr. Richard P.  
Stetson, Chief of Staff, West Roxbury,  
Mass., and Mr. Clyde G. Cox, Director,  
VA Hospital, Birmingham, Ala., Members

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**H. Martin Engle, M. D.**  
**Chief Medical Director**

The Program of training physician assistants as developed by Dr. Stead at Duke University has been reviewed by the staff of the VA Hospital in Birmingham, and the faculty of the University of Alabama Medical College. There is interest and capability, and plans are underway to formulate such a training program at this medical center in the future.

**C. G. COX**  
**Director**  
**VA Hospital**  
**Birmingham, Alabama**

**S. RICHARDSON HILL**  
**Dean**  
**University of Alabama Medical**  
**College**

**PUBLIC LAW 89-785**  
**PROGRESS REPORT - ACTION PLANNED TO TRAIN HEALTH WORKERS**

**FOREWORD**

The Chief Medical Director has said that "The years ahead must surely bring an expansion in our Nation's medical educational and training systems, and the full utilization of all available facilities. The task before the Nation's health facilities is to train a health manpower force in all of the specialties and occupational areas that will be needed in the future and at the same time to maintain high standards of quality. Each passing year must see increasing numbers of young people entering the health occupations. Too, rapid advances in medical science necessitate provisions for those in the health professions to continue their learning to keep abreast of progressive developments."

Public Law 89-785 makes specific reference to "education" as a function of the Department of Medicine and Surgery. The bill provides that there should be an advisory committee at the hospitals to act as a coordinating body for training. Language in the bill permits this committee to be established on either a multidisciplinary basis or on a regional basis, so there is complete freedom in setting up those advisory groups.

The new law authorizes the Administrator to enter into agreements between VA hospitals and other hospitals in the medical community for the exchange use of specialized medical resources if this will obviate the need for a similar source to be provided in a VA facility or for the mutual use or exchange use of specialized medical resources in a VA facility which have been justified on the basis of veterans care, but which are not utilized to their maximum effective capacity. There is provision for reciprocal reimbursement based on a charge which covers the full cost of services rendered, supplies used, and normal depreciation and amortization of equipment.



I. INTRODUCTION: The VA Ad Hoc Committee, of which Dr. Richard P. Stetson, Chief of Staff, VA Hospital, West Roxbury, Mass., and Mr. Clyde G. Cox, Director, VA Hospital, Birmingham, Ala., are members (see Exhibit 5), has been charged with the responsibility of developing a plan and proposals for implementing new legislation for the training and retraining of paramedical personnel. This includes the following considerations:

The training or retraining of 60,000 health workers to add to the health manpower force in the next year.

Thirty thousand of these to be retrained workers such as nurses and technologists.

The training or retraining of 30,000 lower echelon workers such as housekeepers, nurses aides, and dietetic assistants that can be trained and qualified in three months or less.

Develop training programs for new skills similar to the Military Hospital Corpsmen. For example, surgical technicians, nurse technicians, ward unit managers, and aides of various kinds to relieve professional nurses.

Qualify baccalaureate degree students as registered nurses in a 12-month course.

Work with medical schools and colleges in the development and qualification of paramedical personnel at the degree or postgraduate level.

For guidance and direction of the study group of the VA Ad Hoc Committee on "Implementation of Program for Training and Education of Health Services Personnel", Dr. Stetson has set forth the following practical observations regarding education and training needs and the challenges we face in meeting them.

"In October 1966, VA Stations were asked to report their potential for health services manpower training (DM&S Circular 10-66-234). Less than three work days were permitted for submission of this report. Although it is probable that the information provided gives some idea of the maximum number that could be trained in any one of the listed occupations, it is improbable that the total potential is as great as the totals reported for all the occupations.

"VA Hospital West Roxbury is a 300-bed hospital, built in 1943, remodeled in 1953, a spinal cord injury center, and a center for cardiac surgery. It has an active residency program, is affiliated with two schools of nursing, three schools of social work, a school of physical education, a school for training dental hygienists, and currently has a trainee in personnel and one in the Medical Records Library. In addition there are clinical clerks in medicine and surgery and at times sections of medical students come to the hospital for physical diagnosis. On any one day there are approximately 32 trainees on the station excluding the influx of 8 to 12 nurse affiliates and sections of medical students who come to the hospital periodically. It is not realistic to expect that this station could accommodate 260 additional trainees as we reported in October as our 'potential' plus the teaching personnel required for such training. The hospital overall has space barely adequate for its present needs. In some areas space is inadequate for existing needs.

"I cite these conditions, not to minimize our potential for health services manpower training, which is great, but to emphasize the necessity to recognize the need for careful evaluation of station facilities which will be required to accommodate physically any considerable numbers of additional trainees.

"Almost all trainees in the occupations listed in Circular 10-66-234 require desk space, working space, locker facilities, and conference rooms over and above what is available at this station at this time. In every instance training materials will be required.

"In some of the occupations, our present staff could participate in the training on more or less of a preceptorship basis. But the responsibility for the major part of the training would have to be vested in teachers specially skilled and specially trained for these duties. It is presumed that such personnel would be provided by sources outside the station, possibly Extra-VA such as local universities, junior colleges, two-year colleges, and vocational schools.

"I wish to emphasize that I feel that the VA has a tremendous potential for contributing to the training in the health services which are so critically short of manpower. But I feel that in order to fulfill this potential, careful planning and coordination both Intra- and Extra-VA is of utmost importance. It is important to recognize the impact that the 'Allied Health Profession Personnel Training Act of 1966' will have in developing training facilities and personnel in private non-profit and public institutions. This Act provides grants for the construction of facilities for



teaching allied health profession personnel, grants to support basic improvements in curriculums of training centers, fellowships for advanced training to provide teachers and support for the development of new methods of training. It provides support for teaching institutions which give or provide credit toward a baccalaureate degree or its equivalent and which have an affiliation with an accredited teaching hospital with a medical school affiliation. Similar federal aid programs are in effect for nurse training, practical nurse training, and for vocational education not limited to particular occupational fields.

"In 1962, the Manpower Development Training Act made available to individual health care institutions grants for training materials and salaries for teachers of on-the-job trainees in supportive health care occupations. The American Hospital Association jointly with the Department of Labor under its 'Manpower for Health Program' has developed a series of programs for use in seven health care supportive occupations: nursing aide, orderly, ward clerk, housekeeping aide, dietary aide, psychiatric aide, and surgical technician (Weimer: Hospitals, 40:No. 11, p. 83, June 1, 1966). These programs have been implemented in 25 States. Some 2,000 personnel in these occupations have completed training, about 5,500 personnel are currently in training, and it is estimated that 10,000 workers will have been trained by 1967. These programs were devised to provide job opportunities for unemployed or unskilled workers and to provide facilities to give training needed to fit the trainees into permanent staffing patterns and by upgrading the skills and developing uniform job requirements, to develop career opportunities in health fields. It would seem that this was a highly successful program and is the type of training in which the VA could participate importantly. I do not know if the VA could get funds from the Department of Labor for such participation, but, given support for needed construction, teachers, and teaching materials this is the sort of program for which the facilities of the VA are eminently suited.

"I do not believe that we, in this hospital, have taken full advantage of the provisions of the Economic Opportunity Act as far as concerns health supporting occupations. We have had several neighborhood youth workers but these for the most part have been employed in manual work rather than health. We have had some nursing aides who have not proven reliable and who left after a brief period. We have, however, some nursing aides who have completed a course of training in a nursing home who are still working with us and who show promise of developing further skills in nursing. The fact of our poor success in these O.E.O. programs by no means should argue against this avenue for recruiting trainable personnel.

"Some of the occupations involving social and technical duties could come under O.E.O.'s programs for training: Social Work Service, medical records librarian, research, laboratory, x-ray, and dental trainees. The work-study program for college students could be a source of student-trainees for these activities. The adult basic education programs might provide trainees for the lesser skills. If any of these training possibilities are to be developed to any degree, the same restrictions as to space, teaching personnel, and materials must be overcome.

"It is appropriate to relate programs of training health personnel to the participation of the VA in the affairs of the Council of Teaching Hospitals. The Association of American Medical Colleges is oriented toward the programs of medical schools, medical students, and postgraduate medical education - especially internship and residency training. However, medical educators are recognizing more and more the responsibilities of medical schools in taking cognizance of the public demand for better medical care, of the problems that tax-supported medical care pose to doctors, of the magnitude of government support of medical education and research activities, and - most acutely - of the shortage of doctors. In the fact of this shortage, coupled with the tremendous advance of medical technology and knowledge, medical practice becomes heavily reliant upon supporting health services.

"Medical education no longer can be inclusive of known medical knowledge. A modern doctor in the proper management of any but the simplest medical problems must have access to personnel of many skills. The problems of devising ways and means to meet the acknowledged and critical shortage of 'health services personnel' is just as truly the concern of medical school deans as it is of the deans of other university schools, of colleges, of junior and two-year community colleges, and of institutions concerned with vocational education.

"The tremendous potential of the VA cannot be ignored as a partner in the staggering task of developing educational and training programs which will provide the comprehensive medical care that modern society demands and for which modern medicine has the knowledge but not the organization or personnel to provide.

"I have not considered medical student, intern, or residency training of physicians. The VA is recognized for its contribution in the training of doctors. The various forms of residency affiliations and teaching responsibilities which the VA has developed

have worked to the mutual advantage of all partners - the medical school, the affiliated hospital, and the VA hospitals. These programs must be considered as subject to change as change is indicated. Fundamentally, the partnership is established and mutual respect ensures stability. Probably there will be a need for expansion created by the newly developing medical schools. This will be met as these schools begin to produce graduates.

"The need for other health services personnel is neither remote nor transient, nor can it be met by existing facilities for education and training. The goals must concern both long-term and short-term objectives. There is a tendency toward longer training programs in many disciplines. This is justified by the increased complexities of required knowledge. The VA can increase its participation in such programs by affiliation with teaching institutions offering curricula preparatory to such a career. The same principles that have lead to the successful relationships with the medical schools may be applied to the relationships with these teaching institutions. Such programs should be based at the educational institutions with the hospitals providing the practical experience under institutional guidance.

"However, it is unlikely that programs of this type - although producing highly qualified personnel and essential to our ability to meet ultimate health needs - will contribute greatly to meeting our urgent and present needs. Coupled with long term programs there must be effective short term programs. This will perhaps produce workers less skilled, but they can be effective and can train workers who will be able to pursue studies and training for advancement to position of higher skills and greater responsibilities. To train adequately these workers, the educational institution should work out the curricula as in the long term programs, and should provide guidance during the period of training. However, the course content would have emphasis on practical experience on-the-job in the hospital.

"The universities, colleges and vocational schools have access to funds for training teachers, and they can also find support for construction necessary for their programs. It would seem reasonable that the required teaching personnel should be thus provided. Teaching materials, also could come from grants through the schools and colleges.

"Construction of facilities adequate to accommodate an expanded training program by the VA in the degree vitally needed is not available to the VA under present legislation. It would seem that the Federal government has a great obligation to use all of its facilities in its effort to relieve this critical shortage of health services manpower. The VA can do much under existing



circumstances especially in training those health services personnel of the lesser skills in short range programs. But in order to realize its true potential and to contribute its maximum, space seems the major limiting factor."

II. PLAN OF APPROACH: For our guidance and consideration in the development of a plan for education, training, and retraining of allied health science personnel some challenging questions have been extracted from a HEW conference in 1966 on job development and training for workers in health services. These are:

Where does the initiative lie in the local community for promoting effective training programs?

What can be done to move auxiliary health workers into higher level jobs and their respective occupations?

What are some effective methods of selecting trainees for health occupations? Testing is one answer. For example, to reveal suitability and aptitude, dexterity, language, reception and articulation, and arithmetic.

What do we do in areas having no educational facilities beyond the local high school? In this instance an answer might be the establishment of technical institutes and vocational sections in the high schools.

How many inactive professional nurses and other technical people are available for refresher and retraining courses? How can they be attracted to re-enter the health field? How can more instructors and supervisors be trained now and in the future?

What do we need in the way of research in meeting needs of job development in health occupations?

What can be done to implement training programs?

The following steps have been taken toward developing a plan to implement the foregoing:

Determine training and retraining abilities with current and available facilities.

Estimate needs for staffing, space, and equipment in order to expand training and retraining abilities.

Inventory the paramedical jobs which the VA Hospital, the Medical College, and other available schools can train and qualify in a crash program.

Explore the possibility of developing new paramedical skills such as nurse technicians, surgical technicians, etc.

III. OBJECTIVE OF REPORT: To define the programs in which training will be offered; whether they will be offered by the University, the VA, or both. The number of individuals who can be trained per year, with available facilities, with added facilities, and an estimated cost of faculty, preceptors, space, and equipment. This report includes a possible VA-wide approach toward determining the potential for training and retraining of allied health science personnel at the postgraduate, graduate, and less than degree levels.

The initial listing of probable training areas in professional and non-professional jobs is used as a guide of position needs by job category. It is not the objective of the study to limit positions surveyed to only those listed in Exhibit 1. University faculty and VA staff contacted are encouraged to think in terms of skills actually needed in today's hospital environment as opposed to the expansion of training in the customary established skills. This approach in the actual conduct of the survey is intended to bring to light the need for some new types of positions such as surgical assistant, pump oxygenator technician, autopsy technician, etc.

Time limitation for completion of this study does not permit a complete inventory or survey of all possible needed jobs and disciplines. This study should be viewed as an attempt to establish an approach to the implementation of a training program for auxiliary health services personnel. On a sampling basis, this study should depict the scope of training that can be conducted with present staff and facilities. It should also clearly indicate the potential in conservative terms for training that can be accomplished with added staff and facilities.

IV. ACTION TAKEN PRELIMINARY TO CONDUCT OF THE SURVEY: Having outlined the broad objectives to be accomplished by the survey and having developed a general plan of approach in accomplishment of the survey, the Birmingham VA Hospital committee took the following action:

Inventory of Training Positions: Made an inventory of possible and probable training positions in the allied health science field and hospital operations field. These positions were further broken down into professional and non-professional categories and into educational requirement categories such as less than degree level, degree, and postgraduate degree level. Examples are as shown in Exhibit 1, attached.

Development of Survey Worksheet: Having agreed upon the purpose, intent, and objectives of the survey and identified possible training positions, a worksheet was developed as in Exhibit 2, attached. The worksheet is utilized as the basic tool by which the survey committee would communicate with the various disciplines and faculty members of the University and with the staff of the VA Hospital. In arriving at the objectives of the survey and study, a worksheet is prepared for each position surveyed and, when completed, represents a general description of the position, requisites for academic and practical training, source of training, number of individuals who can be trained with present facilities in the community, and the number who can be trained with additional funds, staff, equipment, and space.

V. ORIENTATION CONFERENCES AND MEETINGS: Before actually starting the survey and study and having completed all the foregoing preliminary planning and methods, the committee arranged and met with individuals and groups on the University faculty and the VA Hospital staff to announce the study and to solicit their assistance and to orient them to the method, purpose, and objectives of the study. Following the general orientation of key members of the University faculty and the hospital staff the actual survey was started using the basic worksheet, Exhibit 2, as the standard approach in the survey of each training position.

#### VI. SURVEY FINDINGS:

##### Potential for Education, Training, and Retraining:

##### 1. Degree Level and Above:

The attached Exhibits 3 and 3A show in tabular form the training possibilities at the degree level and above and at less than degree level. It can be seen that 51 individuals can be trained per year, at the degree level and above, with present staff and



facilities with the conduct of 23 courses per year. With additional staff and facilities 223 individuals can be trained at the degree level and above with 28 courses per year.

2. Less than Degree Level:

At less than degree level, 110 individuals can be trained per year with present staff and facilities with the establishment and conduct of 22 courses per year. With additional staff and facilities, 403 individuals can be trained at less than degree level with 50 courses per year.

3. Overview of Capability for Training and Retraining:

To obtain a more comprehensive and in-depth insight into capabilities for training health service personnel requires individual review of each of the worksheets in Exhibit 4. That information which could be extracted from the worksheet and presented in tabular form has been accomplished in Exhibit 3. Additional information which is essential to the comprehension of this study varies considerably with each training position and training course. For example, the worksheets reveal that much can be accomplished with present staff and facilities. However, due to the limited nature of this particular study, no pattern has been revealed which provides an answer to the question of just how much additional staff, equipment, space and money is needed to accelerate education, training, and retraining.

In almost every training position studied there is indication of need for one or more VA staff members for instruction and supervision. A relatively small amount of additional equipment needs is evident beyond the usual instructional materials and audio visual aides and office equipment. To accelerate the training or retraining of the positions surveyed, space for classrooms, conference rooms, offices, and laboratories are required.

As an observation, perhaps it can be concluded that the principle key to determine additional needs for an accelerated training program is the

number of courses to be conducted each year. General evaluation of the worksheets used by the study group shows the need for the addition of at least one VA Staff or faculty member per course. Equipment such as instructional materials appears to be relatively minimal and would generally represent a one-time outlay of funds. As far as space needs are concerned it is obvious that a number and variety of courses could be conducted utilizing common classroom, conference room, and even laboratory facilities. The number of training courses conducted, and, therefore, the number of individuals trained is directly related to the amount of classroom, conference room and workshop space available.

4. Local Reaction to Implementation of the Program for Training and Education of Health Service Personnel

Attached to this study report are examples, in memorandum and letter form, from University faculty members and VA staff members, of the enthusiastic acceptance of the implementation of the new training and retraining program, Exhibit 5. More importantly, Exhibit 5 has been included in this study to forcefully express the current philosophies of leaders in the health science field in this University-VA Hospital complex. It is suggested that each be reviewed for their worth in the future study and final implementation of the new education and training programs.

VII. CONCLUSIONS AND RECOMMENDATIONS: This study represents a general and cursory investigation of the educational and training potential in a local VA hospital setting where there is affiliation with, and access to, the facilities and faculty of a University medical college and dental school. In Birmingham, such opportunities are further enhanced by the ready availability of the resources of a College of General Studies (Arts and Sciences and Engineering), a School of Health Services Administration, a University Hospital, and other hospital and clinical components of a large University-Hospital complex.

Training and education can be provided in practically every discipline of the health science field with the combined resources of the VA, the university with which it is affiliated, and with other local resources such as community hospitals, colleges, junior colleges, technical and trade schools, and high schools.

There is an immediate need for additional teaching facilities, faculty, and training supervisors at the University and the VA. Presumably, the situation here in Birmingham generally typifies that which would be encountered in any local VA hospital setting - whether affiliated or non-affiliated.

Capability to train, retrain, and educate personnel with existing staff and facilities is evident, but on a limited scale, both as to number of personnel trained and the number of different disciplines in which education and training can be provided.

In addition to training and retraining of students or unemployed individuals in certain skills and disciplines, we find that there is a considerable pool of semi-skilled and skilled workers already employed in the health field whose skill could be upgraded with some additional training to fill a variety of the more specialized and technical needs.

Funding of training can be approached on a cost per trainee basis or upon a cost per course basis. In fact, both methods would have to be utilized depending upon the type of training provided. Where didactic training is provided, funding could involve tuition fees, text books and supplies, perhaps even stipend for the trainee.

From a VA hospital organizational and staffing standpoint we envision an education and training department or staff to plan, coordinate, and direct this program. In addition, certain of the hospital programs would need additional supervisory and training employees to carry out the training in their respective programs.

Physical facilities such as classroom and conference space must be provided if education and training is to be accelerated. These are not adequately available at either the University or the VA Hospital. This can mean either or both new construction and rental of space. It was found that where space is available at either the University or the VA Hospital it requires remodeling and alteration to meet training needs.

### EXHIBITS

- |             |   |
|-------------|---|
| No. 1       | Probable Training Areas, Professional and Non-Professional  |
| No. 2       | Survey Worksheet Sample   |
| Nos. 3 & 3A | Tabulation of Gross Survey Findings   |
| No. 4       | Completed Worksheets - Survey of Potential for Training and Education of Health Service Personnel     |
| No. 5       | Reactions and Philosophies as Expressed by Faculty and Staff of the Local Hospital-University Complex |

EXHIBIT NO. 1

PROBABLE TRAINING AREAS,  
PROFESSIONAL AND NON-PROFESSIONAL



## **PROBABLE TRAINING AREAS**

### **Professional**

- |                                     |                            |
|-------------------------------------|----------------------------|
| 1. Audiologist                      | 19. Mycologist             |
| 2. Biologist                        | 20. Nurse                  |
| 3. Biochemist                       | 21. Nurse Anesthetist      |
| 4. Corrective Therapist             | 22. Occupational Therapist |
| 5. Cytologist                       | 23. Parasitologist         |
| 6. Cytotechnologist                 | 24. Pharmacist             |
| 7. Dietitian                        | 25. Pharmacologist         |
| 8. Educational Therapist            | 26. Physical Therapist     |
| 9. Engineer                         | 27. Physicist              |
| 10. Hematologist                    | 28. Psychologist           |
| 11. Histologist                     | 29. Psysiologist           |
| 12. Hospital Accountant             | 30. Recreation Specialist  |
| 13. Hospital Administrative Officer | 31. Research Psychologist  |
| 14. Librarian                       | 32. Serologist             |
| 15. Manual Arts Therapist           | 33. Social Worker          |
| 16. Medical Records Librarian       | 34. Speech Pathologist     |
| 17. Medical Technologist            | 35. Veterinarian           |
| 18. Microbacteriologist             | 36. Zoologist              |



## **PROBABLE TRAINING AREAS**

### **Non-Professional**

- |                                      |  |
|--------------------------------------|--|
| 1. Accounting Technician             | 24. Electronic Technician                    |
| 2. Audiology Technician              | 25. Engineering Technician                   |
| 3. Autopsy Assistant                 | 26. Fire Protection Inspector                |
| 4. Baker                             | 27. Food Management Specialist               |
| 5. Biological Laboratory Technician  | 28. Food Service Worker                      |
| 6. Cardiology Technician             | 29. Guard                                    |
| 7. Carpenter                         | 30. Hospital Secretary                       |
| 8. Computer Aid                      | 31. Housekeeping Officer                     |
| 9. Computer Programmer               | 32. Hyperbaric Chamber Operator              |
| 10. Computer Technician              | 33. Information Clerk                        |
| 11. Computer Specialist              | 24. Inhalation Therapist                     |
| 12. Cook                             | 35. Janitor                                  |
| 13. Corrective Therapy Assistant     | 36. Laboratory Aid                           |
| 14. Crafts Helper                    | 37. Laboratory Animal Caretaker              |
| 15. Cytology Technician              | 38. Laundry & Drycleaning Equip.<br>Mechanic |
| 16. Dental Assistant                 | 39. Laundry Foreman                          |
| 17. Dental Hygienist                 | 40. Laundry Superintendent                   |
| 18. Dental Laboratory Technician     | 41. Library Assistant                        |
| 19. Draftsman                        | 42. Licensed Practical Nurse                 |
| 20. Educational Therapy Assistant    | 43. Machinist                                |
| 21. Electrician                      | 44. Meatcutter                               |
| 22. Electrocardiograph Technician    | 45. Manual Arts Therapy Assistant            |
| 23. Electroencephalograph Technician | 46. Medical Administrative Officer           |

### **Non-Professional (Cont'd)**

- |                                    |  |
|------------------------------------|--|
| 47. Medical Equipment Repairer     | 64. Radiology Technician                                   |
| 48. Medical Illustrator            | 65. Recreation Technician                                  |
| 49. Medical Photographer           | 66. Recruiting Officer                                     |
| 50. Medical Technician             | 67. Refrigeration & Air Conditioning<br>Equipment Mechanic |
| 51. Medical Ward Clerk             |  |
| 52. Nursing Assistant              | 68. Renal Dialysis Technician                              |
| 53. Occupational Therapy Assistant | 69. Research Technician                                    |
| 54. Optometry Aid                  | 70. Restoration Technician                                 |
| 55. Painter                        | 71. Safety Officer   |
| 56. Personnel Director             | 72. Seamstress   |
| 57. Pharmacy Assistant             | 73. Sheet Metal Worker                                     |
| 58. Physical Therapy Assistant     | 74. Social Work Associate                                  |
| 59. Plumber                        | 75. Speech Technician                                      |
| 60. Procurement Officer            | 76. Steamfitter  |
| 61. Projection Equipment Operator  | 77. Supply Officer   |
| 62. Psychiatry Aid                 | 78. Veterinary Technician                                  |
| 63. Psychology Technician          | 79. Warehouseman   |
|                                    | 80. X-Ray Film Processor                                   |

EXHIBIT NO. 2

**SURVEY WORKSHEET SAMPLE**

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** \_\_\_\_\_

**TARGET SKILL:**

**PREREQUISITES:**

**COURSE LENGTH: Total** \_\_\_\_\_ **Months**

(a) **Academic** \_\_\_\_\_ **Months**  
(University Hospital, Medical College, Dental College,  
VA, Other)

(b) **Practical** \_\_\_\_\_ **Months**  
(University Hospital, Medical College, Dental College,  
VAH, Other)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** \_\_\_\_\_

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** \_\_\_\_\_

(a) **Staff**

(b) **Equipment**

(c) **Space Needs**

**TUITION OR STIPEND PER TRAINEE**

**COMPLETION OF COURSE: Degree** \_\_\_\_\_ **CERTIFICATE** \_\_\_\_\_

**SOURCE OF RECRUITMENT:**

**REMARKS:**

**Exhibit No. 2**

**EXHIBIT NOS. 3 & 3A**

**TABULATION OF GROSS SURVEY FINDINGS**

EXHIBIT  
NO. 3

DEGREE LEVEL AND ABOVE

Target Position	No. are or can be trained with present facilities	Course Length MONTHS	No. of courses per year	No. trained with added facilities	No. of courses per year	No. of courses added facilities per year
Case Aide (Social Worker)	3	6	2	4	2	2
Caseworker ( <u>Retraining</u> )	3	3	4	4	4	4
Dietetic Internship	10	12	1	15	1	1
Dietitian ( <u>Retraining</u> )	2	1	10	2	10	10
Hospital Administration	5	24	1	15	1	1
(Masters Degree)						
Medical Records Librarian	0	24	0	5-8	1	1
Medical Technologist*	12	48	1	100	1	1
Microbacteriologist, Hematologist, Chemist, Immunohematologist	6	24	1	10	1	1
Nurse, Professional ( <u>Retraining</u> )	0	3	0	44	4	4
Pharmacy Intern	1	12	1	2	1	1
Pharmacy Resident	1	22	1	2	1	1
Physical Therapist	8	24	1	20	1	1
	<u>51</u>		<u>23</u>	<u>223</u>		<u>28</u>

\*On-going Program



# LESS THAN DEGREE

Target Position	No. are or can be trained with present facilities	Course Length MONTHS	No. of Courses Per Year	No. trained with added facilities	No. of courses per year
Autopsy Technician	2	12	1	2	1
Biological Laboratory Technician	4	12	1	8-10	1
Cardiology Technician	2	12	1		1
Cook	0	4	0	18	3
Cytotechnologist	8	12	1	10	1
Dental Assistant	5	3	3	10	3
Dental Laboratory Technician	1	12	1	3	1
Electrocardiograph Technician	3	6	2	3	2
Food Service Supervisor	0	12	0	2	1
Food Service Worker	0	3	0	35	4
Histopathology Technician	0	12	0	4	1
Inhalation Therapist	8	24	1	20	1
Laboratory Assistant	10	12	1	10	1
LPN (Retraining)	0	3	0	30	4
Medical Records Technician	0	24	0	10	1
Medical Secretary	0	12	0	20	1
Nursing Assistant	16	3	4	100	4
Occupational Therapy Assistant	1	12	1	4	1
Pharmacy Assistant	1	12	1	1	1
Pump Oxygenator Technician	2	12	1	4	1
Radiology Technician (Retraining)	0	2	0	6	6
Radiology Technician	44	24	1	64	1
Research Technician (Hematology)	1	12	1	5	1
Speech Pathologist Associate	0	12	0	5	1
Speech Pathology Aid	0	12	0	5	1
Student of Basic-Nursing Program*	0	36	0	15	1
Surgical Assistant	2	12	1	5	1
X-Ray Film Processor	0	3	0	4	4
	110		22	403	50

\*Dependent upon objectives of academic program

EXHIBIT 3A

EXHIBIT NO. 4

WORKSHEETS

SURVEY OF POTENTIAL FOR  
TRAINING AND EDUCATION OF  
HEALTH SERVICE PERSONNEL  
PUBLIC LAW 89-785

EXHIBIT  
NO. 4

Degree &  
Above

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Case Aide (Social Worker)

**PREREQUISITES:** A.B. Degree

**COURSE LENGTH:** Total 6 Months

(a) Academic 3 Months (University Hospital, Medical College,  
and Psychiatric Clinic (Smolian))

(b) Practical 3 Months (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 3

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 1 per social  
worker (4)

(a) Staff 0

(b) Equipment 0

(c) Space Needs Presently there are no accommodations for  
students from graduate schools (Tennessee,  
Florida, Georgia, and Alabama) who wish us to  
take students

**REMARKS:** See attachment

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Caseworker

**PREREQUISITES:** Master's Degree in Social Work

**COURSE LENGTH:** Total 3 Months

(a) Academic 1½ Months (Medical College, Psychiatric Clinic  
(Smolian)

(b) Practical 1½ Months

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 3

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** one per social  
worker for preceptorial teaching in refresher programming (4)

(a) Staff None

(b) Equipment None

(c) Space Needs None

**REMARKS:** See attachment

ATTACHMENT  
CASE AIDE (SOCIAL WORKER)  
CASEWORKER

On February 2, I talked with Mary Ruth Pippen, Director, Social Service, University Hospital. She is using case aides - has nine who are being paid approximately \$5,000 per year.

She will cooperate with us and we tentatively decided to ask Frances Gasman, who is Director of the Smolian Clinic, to join us. We would rotate the didactic teaching, depending upon the trainee's interest (medical or psychiatric). It would be possible to coordinate a plan whereby trainees and retrainees could be taken in the three programs and one social worker could assume the classroom teaching.

Miss Pippen faces some of the same difficulties which we have - lack of space. Her staff is much larger, she has five staff workers who have completed their graduate work in accredited schools of social work. Each of these are assigned a service and four have two case aides, one has one.

With our present office space we could arrange space for from one to two trainees on the first floor but could not offer seating space in the social workers' offices on the third, sixth, and eighth floors because of the social workers' need for private interviews with patients.

Three months would be sufficient time for a practical course for persons with degrees in social work who had been out of the field because of family responsibilities. They would wish to concentrate on new methodology and present ways of working with such programs as Medicare, Appalachian grants, and health-service training programs, nursing home replacements.

Six months would be a better length for a course for trainees new to the field. Much more didactic teaching would be needed, with corresponding need for an opportunity to make applications of what had been learned by means of actual work situations on hospital wards and in clinics.



**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Dietetic Internship

**TRAGET SKILL:** Applied experience in performing the full range of professional dietetic duties in the area of program development and organization, food production, patient therapy, educational and research in a hospital setting.

**PREREQUISITES:** Baccalaureate degree with major studies in foods and nutrition

**COURSE LENGTH:** Total 1 yr. Months 12

(a) Academic 0

(b) Practical 1 yr. Months 12 (Univ. Hospital; 3 week affiliation with VAH and 2 week affiliation with Jefferson County Public Health Nutritionist)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** Specific colleges and universities and University of Alabama Hospital\*

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 10

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** Miss Terrell tells me that there is a possibility of their increasing this to 15 if the National Dietetic Association requests that this be done to place the college output.

(a) Staff One additional nutritionist for Jefferson County Public Health - no additional VA staff members required.

(b) Equipment See remarks

(c) Space Needs No foreseeable additional space would be required.

**TUITION OR STIPEND PER TRAINEE:** In VA dietetic internships the standard stipend is \$3,548.92 per year. The Armed Forces start their stipend of dietetic majors at the junior year in college. The practicality and results of both these steps should be checked out before Phase 2 is implemented. The University of Alabama's present stipend is \$2100 per year. This is adequate to keep all 10 positions filled - \$2100 X an additional 5 interns=\$10,500.

**COMPLETION OF COURSE:** Certification a possibility for the future, but at present ADA membership.

**SOURCE OF RECTUIMENT:** College output of dietetic majors

\*In Alabama, Auburn, University, Tuskegee, Montevallo

**REMARKS:** In my opinion, the dietetic interns' training could be expanded most feasibly and economically through the University of Alabama as these internships must meet American Dietetic Association requirements. The University of Alabama Hospital dietetic internship presently is qualified by these standards and their students are being affiliated at the VA Hospital and with Jefferson County Public Health Service nutritionists. Miss Terrell, the Chief Dietitian at the University of Alabama Hospital tells me that she is presently approved for 10 dietetic interns, and that she has had no indication from the ADA that their internship program needs to take a greater quota of interns than presently assigned. However, she states that if the need was indicated, they could and would be able to take 5 more interns. As stated above, she also tells me that they are anticipating extensive space and equipment changes in the near future in her department so that at this time it would be most difficult if possible to estimate the additional staff and equipment needs that would be generated by 5 additional interns. But there is a strong possibility that the training of dietitians could be forwarded by appropriations being channeled in this area.

I have also talked with Mrs. Cloud, the Jefferson County Nutritionist, who also affiliates these intern student dietitians. Mrs. Cloud tells me that she would estimate that approximately 20 hours per week per intern of Jefferson County nutritionists' time is spent in directing their important part of the affiliating program. There are only 2 Jefferson County nutritionists. This is typical staffing of nutritionists in states with lower income per capita where nutritionally based health problems abound. So I would like to recommend at least one additional PHS nutritionist be planned for if this internship is to be expanded. I would estimate that VA presently has sufficient staff and equipment to affiliate 5 additional interns.

I would like to suggest that consideration be given to implementation of training in the Dietetic Service in a Phase 1 and a Phase 2 target date division. The Phase 1 to include general upgrading of training on all levels of skills required in the service, and Phase 2 to be aimed at recruitment of dietetic majors on the college level. Such a plan would make available 3 important advantages. (1) We would be taking on work loads which we could practically be expected to absorb, and at the same time meet routine production requirements. (2) We would have more flexibility to learn by our starting experience and modify for effectiveness on this broad program of tremendously important impact. I would suggest that the Phase 2 part not be firmed up in planning until the Phase 1 was under way. Since quality is equally important as quantity, in recruiting professional dietitians, I feel that still much time-consuming study and evaluation of our present recruitment methods on the college level is needed, and should be surveyed for results before new and/or expanded methods are planned. An indice into the results of present recruitment methods being applied could, with time permitting, be fairly accurately ascertained on a nation-wise basis by checking with Central Office dietitians, the ADA headquarters, and possibly questionnaires sent to state universities and federal agencies utilizing dietitians!

services. (3) To utilize a dietitian's services and training efficiently, it is necessary to have well trained subordinate employees at all echelons in the food services field for effective delegation. Before a realistic figure of how many dietitians we actually need to recruit can be ascertained and goals set, a logical approach to training these subordinate levels must be undertaken. As effective training action at the lower level of food service work would solve many of the practicing dietitians' problems, this in itself would be a recruitment technique and would certainly make the dietitian's work more self-satisfying to encourage her to remain in the working field.

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**EQUIPMENT:** The University Dietetic Service is presently anticipating extensive renovation of their Dietetic Service. At this time, it would be impossible to estimate what an additional 5 dietetic interns would require in this area. However, there would be a good possibility that additional equipment would be needed. ADA does have specified requirements on staff, equipment and space for dietetic internships. No additional needs in this area in VA would be required for 5 more dietetic interns.

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**RETRAINING**

**TARGET POSITION Dietitian**

**TARGET SKILL:** Capable of up-to-date methods of performing the full range of professional dietetic duties in the area of program development and organization, food production, patient therapy, educational and research in a hospital setting

**PREREQUISITES:** American Dietetic Association membership or former membership

**COURSE LENGTH:** Total 5 Weeks

(a) Academic 1 Week (University Hospital and combination of ADA, PHS, and community facilities)

(b) Practical 4 Weeks (VAH and combined with community health facilities and Alabama Dietetic Assoc. dietitians)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** See "Remarks"

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)**                     \*

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)**                     \*

(a) Staff                      One part-time dietitians' salary (paid through the State Dietetic Assoc. or State PHS) to coordinate this training program and the one for food service supervisors.

(b) Equipment              No additional need

(c) Space Needs            Classroom space adequate to accommodate the number of applicants wishing to take the course

**TUITION OR STIPEND PER TRAINEE:** GS-5 grade level \$5,331 per year, or \$2.56 per hour

**COMPLETION OF COURSE:** Certificate

**SOURCE OF RECRUITMENT:** Through State PHS Institutional Nutrition Consultant who assists hospital and nursing home administrators to obtain ADA consultant dietitians.

\*VAH could give 2 applicants practical experience at one time or 20 per year, and the University states that they could assist with additional if needed.



**REMARKS:** In order to meet this affirmed need (in connection with recruitment of ADA dietary consultants for Medicare), most states, including Alabama, have under sponsorship of State Dietetic Assoc. and with the assistance of PHS nutritionist run short courses or seminars and set up and issue written guide lines in their efforts to retrain and bring back into the active field retired ADA members. The University of Alabama has also applied for a grant to support a workshop to train in this area this summer.

In my opinion, funds should be made available for such courses to be run on a systematic and recurring basis. Such courses would be most helpful if coordinated with a short preceptorship-type experience in a hospital situation. Our hospital could furnish 2 such preceptorships, and I feel sure that other hospitals in the community with ADA staff would be willing to help with this project under State Dietetic Assoc. leadership. However, I believe that applicants wishing to take this type course would be limited in number because most ADA dietitians wishing to work are hired immediately as there is such a shortage in the field. This in no way lessens, in my opinion, the importance of establishing such a training course because such training could increase the effectiveness of the dietitian returning to the work force in the shortest length of time.



**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION Hospital Administration (Masters Degree)**

**TARGET SKILL:** To develop high quality administrators for community and teaching hospitals and to provide the health care field with teachers and researchers

**PREREQUISITES:** BS Degree with 2.0 average in major field

**COURSE LENGTH:** Total 24 Months

(a) Academic 12\* Months (University)

(b) Practical 12\* Months (University of Alabama Hospital, VA Hospital, Birmingham, and other hospitals approved for preceptorships)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)	<u>5</u>
NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)	<u>15</u>

(a) Staff Funds for 3 to 5 part-time instructors

(b) Equipment None

(c) Space Needs Renovated classrooms made from warehouse area presently available

**TUITION OR STIPEND PER TRAINEE:** \$3,600 per year

**COMPLETION OF COURSE:** M. S. Degree

**SOURCE OF RECRUITMENT:** Colleges throughout Alabama and qualified staff personnel presently engaged in hospital administration activities.

**REMARKS:** The health care field is in dire need of more capable, high quality, trained hospital administrators. This Masters degree program instituted here is a definite step toward producing better qualified hospital administrators. With additional assistance, the number of trainees may be appreciably increased as well as the possibility of an early entry into the PH.D. level of training for this program.

\*The first year is almost completely academic (36 semester hours). The last year is in residency in a hospital.

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Medical Records Librarian

**TARGET SKILL:** To conduct the MRL Program in an institution

**PREREQUISITES:** Two years college

**COURSE LENGTH:** Total 24 Months

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** University Hospital and  
College of General Studies

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 0

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 5-8

(a) Staff One Staff Medical Records Librarian

(b) Equipment Electric typewriters

(c) Space Needs Classroom (400 sq. ft.); Laboratory space  
(400 sq. ft.)

**COMPLETION OF COURSE:** B.S.-MRL

**SOURCE OF RECRUITMENT:** Local

**REMARKS:** This is one of the most needed categories of the ancillary services. There is not only a need for the journeyman level to process and work with charts, but there is a great need for advanced training and education for directors and teaching personnel in the field. There are only a few registered MRL's with more than a single degree and practically no graduate level employees.

**SURVEY OF POTENTIAL FOR TRAININGS AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Medical Technologist

**TARGET SKILL:** Capable of performing the full variety of professional duties in hospital laboratory setting

**PREREQUISITES:** Three years of college which has included prescribed courses in biology, chemistry and mathematics

**COURSE LENGTH:** Total 12\* Months

(a) Academic \* Months

(b) Practical \* Months

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 12 (on-going program)

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 100

(a) Staff\*\*

(b) Equipment\*\*

(c) Space Needs\*\*

**COMPLETION OF COURSE:** B.S.-MT Degree

**SOURCE OF RECRUITMENT:** Local

**REMARKS:** See attached information, paragraphs 1, 2, and 3

\*See attached information, paragraph 4

\*\*See attached information, paragraph 5

## **Medical Technologist**

### **1. PRESENT STATUS**

On the Birmingham campus University of Alabama, there is a 12-month program which qualifies students to take the examination of the Registry of Medical Technologists of the ASCP. This program is financed by the University of Alabama Hospitals and Clinics and has a capacity of 30 students.

Prerequisites are either:

1. Three years college and degree eligibility including 16 semester hours credit in Chemistry, 16 semester hours credit in Biology and 3 semester hours credit in mathematics or

2. Four years college including a baccalaureate degree including courses listed above

Twelve students has been the average annual enrollment over the last 5 years. There has been no one real focus of recruitment. The Tuscaloosa campus has supplied 44% of the students, other Alabama colleges 33% and the remaining 23% come from outside the state.

The students time is allotted:

Formal course work (Didactic)	- Approximately 350 hours	- 18%
Clinical Practice (Practicum)	- Approximately 1350 hours	- 69%
Research Techniques	- Approximately 60 hours	- 8%

### **2. SHORTAGE**

There are at present 12 (6 in Birmingham) AMA accredited schools of Medical Technology in Alabama with a current enrollment of approximately 75 students. To fulfill requirements for adequate laboratory staffing it has been estimated conservatively (Pre-Medicare) that 177 medical technologists should be graduated each year. This figure is based on the estimate of one medical technologist needed for each 10 active general hospital beds.

### **3. OUTLOOK**

Two recent events, the establishment of the College of General Studies and the administrative union of the clinical laboratories of University Hospital and the Veterans Administration Hospital into a single Department of Clinical Pathology, have brightened the outlook for the training of Medical Technologists. This latter is only enhanced by the soon-to-be-completed physical connection between the hospitals. It is now possible to offer on this campus a four year baccalaureate program in Medical Technology and, with proper support, a goal of 100 graduating students per year is feasible.

The most obvious advantage of the College of General Studies is its effect on recruitment. Since its establishment last year the inquiries about Medical Technology have increased tremendously. By building a close relationship between the Department of Allied Health Sciences of the College of General Studies and the Department of Clinical Pathology, we should be able to guide and encourage students from their earliest days in college thus obviating the heretofore high drop-out rate. We anticipate about 75 students will follow this curriculum. The other 25 will transfer from other colleges at the Junior year level.

The proximity of the Veterans Administration clinical laboratories offers a 100% increase in the amount of clinical material available for clinical practice. In present circumstances, however, severe shortages of staff and space barely allow service needs to be met. The added burden of teaching would be impossible. These difficulties will be corrected by September 1967.

#### 4. PROPOSAL

It is proposed that a four-year baccalaureate program be instituted. In this curriculum the first two years will be spent mainly in the Department of Allied Health Sciences of the College of General Studies. Although Medical Technology Seminar Courses (1-2 semester hours credit) may be offered during the freshmen and sophomore years, most of the courses will be arts and science courses which are basic requirements for a bachelor's degree. At the end of the sophomore year, the student will transfer to the Department of Clinical Pathology.

The Junior year will consist of formal course work in Microbiology, Statistics, Electronics, Histology, Genetics and Basic Immunology, Hematology and Electives for the total of 30-32 semester hours credit.

The Senior year will include formal course work in Biochemistry and Nuclear Physics, and Quality Control (12 semester hours credit). Twelve semester hours credit will be gained for Clinical Practice for which the Clinical Laboratories of University of Alabama Hospitals and Clinics and the Veterans Administration Hospital will be used. It is probable that this work will extend a student's usual time for a bachelor's degree by about six months.



## 5. NEEDS

### Baccalaureate Program in Medical Technology (Junior and Senior Years)

		1st Year		Total	Subsequent Yrs.		
		Jr.	Sr.		Jr.	Sr.	Total
No. Students	12	30		50	100	100	200
Staff							
Full-time (Didactic)	4	3		5	10	10	20
Part-time (Practicum)	10	-		10	-	10	10
Space							
Classroom	1	1		3			
Laboratory	2	2		3			
Equipment		\$100,000		\$6000		\$25,000	
Stipend/Trainee/Year	\$600 (equivalent)					\$300	\$60,000

The real needs for subsidy in this program are:

1. Expansion of staff and space in VA clinical laboratories to provide facilities for teaching in addition to excellence in patient care.
2. Classroom and student laboratory accommodations fully equipped for the presentation of the Junior and Senior academic years in a baccalaureate program in Medical Technology.
3. Stipend for student trainees during the final six months of Practicum.

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Microbacteriologist, Hematologist,  
Chemist, Immunohematologist

**TARGET SKILL:** Capable of performing professional and scientific work  
in clinical laboratory

**PREREQUISITES:** MT (ASCP) and baccalaureate degree

**COURSE LENGTH:** Total 24 Months

(a) Academic 12 Months (Medical College)

(b) Practical 12 Months (University Hospital, VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 6

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 10

(a) Staff One senior staff per student

(b) Equipment Initial \$25,000 - subsequent \$5,000 per year

(c) Space Needs Four laboratories of 400 sq. ft.

**STIPEND PER TRAINEE:** \$3,000/trainee/year

**COMPLETION OF COURSE:** M.S. Degree

**SOURCE OF RECRUITMENT:** Local qualified technologists

**REMARKS:** See attached information

Microbiologist and Chemist (Suggested title changes: Clinical Laboratory Scientist (Microbiology) and Clinical Laboratory Scientist (Chemistry) and Clinical Laboratory Scientist (Hematology) and Clinical Laboratory Scientist (Immunohematology))

#### 1. PRESENT STATUS

The Department of Clinical Pathology of the Medical College of Alabama offers a program leading to a M.S. degree. Prerequisites are that the applicant be a M.T. (ASCP) with a baccalaureate degree, with 24 semester hours credit in Chemistry, 6 semester hours credit in Physics and courses in math through analytical geometry. The program, which includes a thesis, is completed in not less than 2 academic years. There are three areas of concentration: Microbiology, Chemistry, and Hematology-Immunohematology.

The program was inaugurated in September 1965. There have been no graduates to date but there are four students currently enrolled and there will be a total of six in the next academic year.

#### 2. SHORTAGE

The M.S. degree in Medical Technology is a relatively new type program. There are only about ten such in the nation. To my knowledge there are no figures available on the need for this category of laboratory worker. A rough estimate would be 1 per 100 hospital beds. Using this figure, Alabama would presently require 115. In the clinical laboratory of University Hospitals and Veteran Administration Hospital there exists a need for one such person in each major section, i.e., M.S. (Chemistry) for Chemistry Section; for the Bacteriology section. Quite probable these persons would also be utilized in the basic and clinical research areas of the Medical Center complex.

#### 3. OUTLOOK

With proper support in terms of trainee stipend, space and equipment, the limiting factor for training Clinical Laboratory Scientists is faculty. The optimum ratio is one student per senior staff (M.D. and PH.D.) member of the Department of Clinical Pathology. At present there are 11 senior staff positions. Proper expansion of Veterans Administration Hospital faculties (see M.T. proposal) would probably call for at least a 50% increase at this level.

#### 4. NEEDS

Stipend/Student/Year	\$3,000
Staff (Faculty)	6 (see above)
Equipment	\$25,000 initially; \$5,000 student/year thereafter
Space	Four research labs 20' x 20'

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**RETRAINING**

**TARGET POSITION** Nurse, Professional

**TARGET SKILL:** Capable of performing all nursing care duties and professional nurse responsibilities assigned to staff ward nurse

**PREREQUISITES:** Current licensure in any state. Alabama license required for employment in other than Federal Government agencies

**COURSE LENGTH:** Total 12 Weeks

(a) Academic 120 Hours (VAH)

(b) Practical 360 Hours (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** Veterans Administration Hospital

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 0

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 11 per 12 weeks

(a) Staff One instructor and part-time clerk

(b) Equipment Audio visual aids, instructional materials, student chairs, tables, portable blackboard

(c) Space Needs Office space for instructor and clerk typist, locker room space, classroom to accommodate 15-20 people, ward conference room, additional library space

**TUITION OR STIPEND PER TRAINEE:** Stipend equivalent to that specified under Nurse Training Act

**COMPLETION OF COURSE:** Certificate

**SOURCE OF RECRUITMENT:** Inactive nurses in community, files of District Nurses Association and State Board of Nursing, Alabama

**REMARKS:** The trainee could participate in applicable conferences, workshops, etc., provided by the University of Alabama Continuing Education Program or University of Alabama School of Nursing.

**Factors determining course length:**

1. Length of time in inactive status.
2. Type of professional education; e.g., diploma, Associate Degree, Bachelor or Masters Degree.

3. Post-graduate education and experience.
4. Position anticipated.

#### GOOD REFERENCES

"Inactivitis" - Alma Wooley, American Journal of Nursing, December 1966, p 2661, discusses the problem of the inactive nurse as a disease: etiology, treatment (employer's role), prognosis and preventive measures. Stresses need for annual refresher, along with re-registration, part-time work as no more time consuming for wife and mother than other activities she has to get a baby sitter for. Good references listed, especially relative to status of women and inactivity in profession.

"RNs Tell Why They Took Off Their Caps" - James Stacey, The Modern Hospital, January 1967, p 77, contains verbatim statements from inactive nurses about why they took off their caps:

"Nursing too demanding, physically and emotionally."

"Family demands."

"Nurses expected to demonstrate the dedication of doctors without employing either the status or remuneration of doctors."

#### SUGGESTIONS

1. A suggestion for all Veterans Administration hospitals which might be followed by other institutions concerned with "inactivitis":

Regardless of the position the nurse held, status or grade acquired, offer each registered nurse, retiring from nursing, the opportunity to come back and work for a fixed hourly rate as a staff nurse at whatever time she can - the hourly rate to be below the rate for regular full-time or part-time registered nurses. This rate to be paid out of retraining funds as a work experience to prevent obsolescence. Such a plan would make use of skills of nurses who can not work full or part-time because of illness, age, family responsibilities, etc.

Each government hospital could have X number of dollars to spend in this way in addition to regular staff.

2. The VA might wish to give additional thought to upgrading nursing personnel, especially the nursing assistant, and licensed practical



nurse, through selective training and stipends. This reflects the philosophy that everyone should function at highest level of which he is capable and to which he aspires.

Many licensed practical nurses could not and still cannot afford the cost of nursing education, particularly at the college level. They have taken LPN courses in order to do nursing but some are capable of earning a Bachelors degree or Associate Arts in Nursing. Money holds them back.

We have many potential licensed practical nurses or nurses in the nursing assistant group. Many have college credits they could transfer to a collegiate program. The majority of nursing assistants are male and, being the breadwinner of the family, would remain in nursing. They cannot afford the cost and want to keep up Civil Service benefits. Could they work  $\frac{1}{2}$  time at present job and rate of pay, keep benefits and be paid stipend for training? It would take longer to produce nurses this way but I believe they would be with us for a longer time than the young female nurse.

### INFORMATION WHICH MIGHT BE HELPFUL

#### I. Retraining of Registered Nurses:

We think the problem will be finding the registered nurses who wish to be retrained if they are expected to reenter the profession following training. Most nurses, who are "out", will return only in case of national disaster and/or financial need. Many would probably like to be refreshed, to be brought up to date, and to acquire some self confidence. If the program carries a commitment to return to nursing for any specified time, we do not feel many will be interested. Those who want or need to come back can get sufficient retraining through orientation programs. These may need to be strengthened and individualized to meet the needs of the nurse. The minimum wage standard could affect maid service as the more competent and desirable person can find employment at a higher salary than the nurse could afford to pay.

Recent articles in the American Journal of Nursing, Nursing Outlook, and Modern Hospital were reviewed. A pertinent one was in the Nursing Outlook, January 1967, "Refresher Courses and the Reactivation of Nurses", Melody Marshall and John Bruhn. They report a study of 92 nurses who took a University of Oklahoma refresher course between April 1960 and July 1964. The group studied had returned to full or part-time active practice following the course. "The major reasons nurses gave for becoming inactive were family responsibilities, inadequate salaries and unsuitable hours." Reasons given for the refresher courses being helpful were:

1. "Providing information regarding new medications, treatments, and procedures."
2. "Restoring self confidence."
3. "Association with other nurses."
4. "Providing an incentive to return to nursing."
5. "Pointing out the need for special help for the inactive nurse."

Reason given why the refresher courses were not thought helpful:

1. "Not enough practical experience."
2. "Practice sessions had no planning."
3. "Wasted time on - subjects of no value, coffee breaks, walking around looking at empty rooms."
4. "Not inclusive enough."
5. "Did not refresh us in the duties of the nurse today."

Depending upon the definition of retraining, we might accept an objective as quoted from the Nursing Outlook: "The primary goal of refresher courses is to reorient the inactive nurse to professional nursing and encourage her to become active again."

For nurses wanting retraining in hospital nursing, we could offer excellent clinical experience in medical and surgical nursing. We could make a contribution to retraining in psychiatric, tuberculosis, geriatric, operating room and outpatient nursing. Selected nurses could be retrained in team nursing, ward administration, teaching and supervision.

## II. Training of Student Nurses:

As we see this a great deal would depend upon the objective of the school of nursing. Curriculum is set up to meet the requirements of the National League for Nursing and schools are definitely concerned with maintaining accreditation. We could provide clinical experience for the student in general medicine and surgery, and our specialties. Students could be from the Bachelors, Masters, diploma and Associate degree programs. VA Nursing Service has been gradually working away from the diploma program and working toward the Bachelor and Masters program.

### **III. Training Nursing Assistants:**

Depending upon the definition of "nursing assistant", we could train this category of worker in a 3-month period. The basic skills common to all nursing aides:

Bed making.

Lifting and moving patients.

Escort duties.

Baths - shower, tub, and bed.

Bedpans and urinals.

Feeding patients.

Enemas.

Plus the procedures frequently performed by them, such as TPR (temperature, pulse, and respiration) and blood pressures, which can be taught in two to four weeks.

Supervised practice should make them able to work as team members in most general hospitals. We could also provide training for certain nursing assistants to work in Central Service, operating room and Outpatient areas.

### **IV. Training of Licensed Practical Nurse Students:**

A few states, I believe Texas and Louisiana, may be others, call the LPN Licensed Vocational Nurses (LVN).

Again, depending upon the objectives of the school we could provide clinical facilities for experience.

### **V. Retraining of Licensed Practical Nurse:**

Clinical facilities are available for this group.

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

TARGET POSITION Pharmacy Intern

TARGET SKILL: Licensed Pharmacist

PREREQUISITES: Graduate of an accredited college of pharmacy

COURSE LENGTH: Total 12 Months

(a) Academic 0 Months

(b) Practical 12 Months

SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:

NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES) 1

NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT) 2

(a) Staff 1 staff Pharmacist

(b) Equipment \$3000 - \$5000

(c) Space Needs 300 square feet

TUITION OR STIPEND PER TRAINEE: \$5000 - \$6000

COMPLETION OF COURSE: Degree

REMARKS: The Alabama Code (Act No. 205) states that a person must serve his internship under the immediate direct supervision of a pharmacist on the premises registered by the Alabama State Board of Pharmacy. Every pharmacist preceptor must have been a licensed pharmacist for a minimum of three (3) years and have been actively engaged in the practice of pharmacy over the year next preceding the date of his approval by the Board. His employment must be on a full time basis in a pharmacy approved by the Board for intern training.

Every application for a permit from the State Board of Pharmacy shall be accompanied by a fee of Fifty Dollars (\$50.00). Every application for a renewal permit shall be accompanied by a fee of Twenty-Five Dollars (\$25.00).

The above points out that the hospital must have a permit and be approved by the State Board before it can participate in the internship training program.

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Pharmacy Resident

**TARGET SKILL:** Master's Degree in Hospital Pharmacy

**PREREQUISITES:** Must be a Registered Pharmacist. The hospital must be affiliated with an accredited college of pharmacy which offers a master's degree in hospital pharmacy

**COURSE LENGTH:** Total 22 Months

(a) Academic 22 Months (Pharmacy school offering master's degree in hospital pharmacy)

(b) Practical \* . Months (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** School of Pharmacy

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 1

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 2

(a) Staff 1 staff pharmacist

(b) Equipment \$3000 - \$5000

(c) Space Needs 300 square feet

**TUITION OR STIPEND PER TRAINEE:** See remarks below

**COMPLETION OF COURSE:** Master's Degree

**REMARKS:** \*Residents serve in a VA hospital 28 hours a week at \$2.91 an hour, concurrent with university graduate work leading to a master's degree.

Samford University has the only school of pharmacy near enough for us to be affiliated. At the present time Samford does not offer a master's degree in pharmacy. They plan to offer a master's degree in the future, but this is probably two years away.



**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P.L. 89-785**

**TARGET POSITION** Physical Therapist

**TARGET SKILL:** To carry out the functions in a rehabilitation program of physical medicine

**PREREQUISITES:** Two years of basic education preferably directed toward the degree in physical medical rehabilitation

**COURSE LENGTH:** Total 24 Months

(a) Academic 12 Months (Other)

(b) Practical 12 Months (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 8

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 20

(a) Staff Two additional teaching staff members

(b) Equipment \$10,000 initial equipment and \$5,000/year

(c) Space Needs Two laboratory areas, 300 sq. ft. each  
One classroom, 400 sq. ft.

**COMPLETION OF COURSE:** B.S.-PT Degree

**SOURCE OF RECRUITMENT:** Colleges located within State

**REMARKS:** The approval of a new curriculum in this field here in the Center will enable the school to expand its enrollment by 12 students by this fall. Additional facilities are needed to support this increase and further expansion may be possible in the future.

Less Than  
Degree

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Autopsy Technician

**TARGET SKILL:** Capable of assisting the pathologist or physician in post mortem examinations, including performance of certain technical procedures

**PREREQUISITES:** High school graduate and graduate of a school of mortuary science or junior college graduate

**COURSE LENGTH:** Total 12\* Months

(a) Academic 12\* Months (University Hospital and VAH)

(b) Practical\* (University Hospital and VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** Medical College and VAH

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 2

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)**                     

(a) Staff 0

(b) Equipment 0

(c) Space Needs 0

**TUITION OR STIPEND PER TRAINEE:** GS-2, GS-3

**SOURCE OF RECRUITMENT:** Local

**REMARKS:** These trainees would receive on the job instruction by the Pathology Department staff and take the course in Pathology, which is offered to paramedical groups. By the end of the training year the employees would be capable of handling the clerical duties, such as proper identification of body, legal forms, etc. They would be capable of removing the body organs, weighing, measuring and arranging them in order of the physicians examination. They would tie off vessels and restore the body in good condition for the undertaker. In addition they would be trained to maintain the autopsy area, equipment, supplies and microscopic equipment

\*Academic and practical training are interspersed throughout training period

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Biological Laboratory Technician

**TARGET SKILL:** Capable of providing technical support and assistance to professional personnel in biological sciences or any field

**PREREQUISITES:** High school graduate

**COURSE LENGTH:** Total 12 Months

(a) Academic 3 Months

(b) Practical 9 Months (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** Research staff

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 4

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 8 - 10

(a) Staff 0

(b) Equipment Associated audio-visual aids

(c) Space Needs Classroom space - approximately 400 sq. feet

**TUITION OR STIPEND PER TRAINEE:** GS-2

**COMPLETION OF COURSE:** Qualified to hold a position as Biological Laboratory Technician

**SOURCE OF RECRUITMENT:** Local or may be sent here by other hospitals for training

**REMARKS:** These technicians would be rotated around through the following areas: metabolic research, diabetic research, heart catheterization laboratory, heart station, artificial kidney, respiratory disease studies, and radioisotope laboratory. The staff in each area would teach by way of lectures, demonstrations and visual aids to support a sufficient background to understand the technical aspect of the work. There is a definite need for this type personnel to assist the professional personnel with the work.

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Cardiology Technician

**TARGET SKILL:** Perform BCG, KCG, VCG, and PCG

**PREREQUISITES:** High school/junior college level

**COURSE LENGTH:** Total 12 Months

(a) Academic \* Months

(b) Practical \* Months

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 2

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)**                     

(a) Staff None

(b) Equipment None

(c) Space Needs None

**TUITION OR STIPEND PER TRAINEE:** GS-2

**SOURCE OF RECRUITMENT:** Local

**REMARKS:** As the facilities of cardiology study increases, the demands of technical assistants increase proportionately at this Medical Center. Further, the local hospitals utilizing more of this type employee will increase demands in the future.

**\*The academic training will be in conjunction with the practical training**



**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF  
HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Cook

**TARGET SKILL:** Capable of performing full journeyman level cooking and food production responsibilities in an institutional situation. This would include some basic knowledge of meat cutting and baking. Develop some understanding and capacity for leadership of lower level food service workers.

**PREREQUISITES:** A high school diploma or equivalent or completion of junior high with minimum of 5 years experience in progressively responsible cooking duties.

**COURSE LENGTH:** Total 4 Months

(a) Academic 1½ Months (VAH and community facilities such as junior colleges, national and local restaurant associations, and local trade schools.

(b) Practical 2½ Months (VAH)

(NOTE: For best results I suggest these be worked together)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** Dietitian set up and coordinate course

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 0

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 6 at a time or  
18 per year

(a) Staff 1½ additional dietitians for this, and food service worker training I would estimate at the GS-9 level. One additional supervisory cook at our hospital and possibly another for relief purposes throughout the VA system

(b) Equipment None

(c) Space Needs Office space for 2 dietitians and classroom space to accommodate as many as 10 persons in a comfortable teaching atmosphere

**TUITION OR STIPEND PER TRAINEE:** I would suggest that middle (for cooks around \$2.00 per hour) and low minimum wage (for F.S.W. around \$1.50 to \$1.75 per hour) stipend be considered\*.

\*A stipend in these pay ranges would definitely be necessary for the Food Service Supervisor, Cook and Food Service Worker group because many of these persons that need training so badly are and must support families.

**COMPLETION OF COURSE: Certificate**

**SOURCE OF RECRUITMENT: High schools and persons already serving in community health and school facilities in food service departments.**

**REMARKS: Establishment of a course of this type should be checked out with junior colleges' curriculum, local restaurant association groups for cook's courses, and trade schools' training located near designated training VA hospitals, as they might offer some courses appropriate to this group. Consideration should be given to subsidizing the present instructors where effective and possible. Also possibility of utilizing Army cooks schools should be evaluated, as they have accomplished more in this area than any other group I am aware of. We also have some excellent resources for instructors among our VA cooks. If these resources are to be utilized effectively, the VA hospitals sharing these training responsibilities for instructors should be budgeted for relief of their lead cooks, and travel expenses for these employees. The VA hospitals taking the bulk of responsibility for practical preceptor-type training should be fully staffed and funded for adequate supervisory cooks (this would mean one additional supervisory cook at our hospital).**

**In the preliminary recommendation (see letter of October 11, 1966, to AA/COS) I arbitrarily suggested that training for "dietetic workers" be divided into cooks' training and food service worker training. This suggestion is made for two reasons: 1. Basic capabilities must be considerably higher to perform the skilled duties required of a cook as compared to the semi-skilled duties of a less responsible food service worker. A cook must be able to perform simple mathematical calculations including fractions, and must be able to give instructions both orally and in writing with sufficient clarity to get the details of the job done through others. 2. An instructor could not communicate economically with these two levels of ability at the same time.**

**See related "Remarks" section under Target Position: Food Service Worker.**

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Cytotechnologist

**TARGET SKILL:** Screening smears of body materials for the identification of cancer cells. Collecting, preserving, staining and other duties associated with cytology

**PREREQUISITES:** 2 years of college (with 12 semester hours of biology)

**COURSE LENGTH:** Total 12 Months

(a) Academic 12\* Months (University Hospital)

(b) Practical 12\* Months (University Hospital and VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** University Hospital

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 8 for 6 months

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 10 for 1 year

(a) Staff 3 additional cytotechnologists (2 at VA, 1 at UH)

(b) Equipment 6 microscopes (3 at VA, 3 at UH)

(c) Space Needs Classroom (240 sq. ft. at VA or UH)  
2 Laboratories (144 sq. ft. each - 1 at VAH,  
1 at UH)

**TUITION OR STIPEND PER TRAINEE:** \$2,700 per student per year for 4 students

**COMPLETION OF COURSE:** ASCP National Registry

**SOURCE OF RECRUITMENT:** Local colleges and students being sent for training by pathologists from hospitals throughout Alabama

**REMARKS:** Presently an approved school for cytotechnologists is being conducted at the University Hospital, under the director of Dr. Edmond Dowling, approved to train 8 students in cytotechnology for a 6-month period.

This combined effort of training under the Omnibus Bill would enable this area to produce ten well-trained cytotechnologists, of which there is a national and local shortage. This would add 6 months of extended training, which is urgently needed, and two additional student per year.

\*Academic and practical training are interspersed throughout training period

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

TARGET POSITION Dental Assistant

**TARGET SKILL:** Capable of providing general chair-side assistance to the professional dentist in treatment of patients for any type of dental condition. Must also be familiar with preparation of materials, sterilization, instrument layout, etc.

**PREREQUISITES:** High School Graduate

**COURSE LENGTH:** Total 12 Weeks

(a) Academic 6 Weeks (Dental College and VAH)

(b) Practical 6 Weeks (Dental College and VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** See remarks below

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 5

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 10

(a) Staff One additional dentist

(b) Equipment Visual aids

(c) Space Needs Classroom space (144 Sq. ft.)

**TUITION OR STIPEND PER TRAINEE:** GS-2

**COMPLETION OF COURSE:** Certificate

**SOURCE OF RECRUITMENT:** Local or sent for training by dentists throughout State.

**REMARKS:** Five trainees in this category could be trained presently with the present facilities and five more may be added with one professional instructor and sufficient classroom space. A combination of Dental School and VA staff would provide the academic instruction as well as attending some basic courses with freshman dental students

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Dental Laboratory Technician

**TARGET SKILL:** Casting and making dentures, partials and complete plates.

**PREREQUISITES:** High school graduate

**COURSE LENGTH:** Total 12 Months

(a) Academic 6 Months (See Remarks)

(b) Practical 6 Months (See Remarks)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 1

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 3

(a) Staff One Dental Laboratory Technician, GS-9

(b) Equipment 0

(c) Space Needs 0

**TUITION OR STIPEND PER TRAINEE:** GS-2, GS-3

**COMPLETION OF COURSE:** Certificate

**SOURCE OF RECRUITMENT:** Local or sent for training by dentists throughout State

**REMARKS:** One Dental Technician may be trained with present facilities and with one additional Dental Technician, the number of trainees may be increased to three



**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Electrocardiograph Technician

**TARGET SKILL:** Capable of operating an electrocardiograph and other specialized amplification equipment. Must be able to calibrate and standardize equipment used

**PREREQUISITES:** High school graduate

**COURSE LENGTH:** Total 6 Months

(a) Academic 0

(b) Practical 6 Months (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 3

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)**                     

(a) Staff 0

(b) Equipment 0

(c) Space Needs 0

**TUITION OR STIPEND PER TRAINEE:** GS-2, GS-3

**COMPLETION OF COURSE:** Eligible for position

**SOURCE OF RECRUITMENT:** Local

**REMARKS:** The increase in routine and follow-up EKG work in clinics and hospitals has created a definite shortage of this trained personnel

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Food Service Supervisor

**TARGET SKILL:** Capable in uncomplicated food service departments (such as nursing homes and extended care facilities) to function under the limited consultation of ADA dietitians in the area of program development and organization, food production, and patient therapy in the institutional setting.

**PREREQUISITES:** A high school diploma or equivalent or completion of junior high with a minimum of 5 years experience in a supervisory capacity in an institutional situation

**COURSE LENGTH:** A 6-month course; a 1-year course; and a 2-year course.  
See "Remarks" for further information.

(a) Academic (Jefferson State Junior College, State P.H.S. Institutional nutrition consultant, A.D.A. correspondence Course

(b) Practical (Univ. Hospital, VAH, and community health facility institutions)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** Jefferson State Junior College, P.H.S. and A.D.A.

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)**                     \*

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)**                     \*

(a) Staff                      See remarks under Dietitians' retraining outline

(b) Equipment              No additional needed

(c) Space Needs            No additional needed

**TUITION OR STIPEND PER TRAINEE:** WA-9 service schedule at \$2.24 per hour

**COMPLETION OF COURSE:** Certificate and membership in the Hospital, Institution, and Educational Food Service Society (affiliated with A.D.A.)

**SOURCE OF RECRUITMENT:** High school graduates and persons already serving in community health and school facilities in food service departments.

\*The VAH could give 2 of these applicants practical training each year, and some of their practical experience.

**REMARKS:** There is a tremendous need for this type training if the A.D.A. consulting dietitians' efforts and time are to be used most advantageously and economically. In 1965, less than 1% of nursing homes employed A.D.A. dietitians and were using food service supervisors with very limited training. With the advent of Medicare with requirements for some trained consultation in dietary department, this situation should eventually be vastly improved.

I would recommend that such a course be coordinated on the ground level with the Jefferson State Junior College as I have been informed that they have such a course in the planning stages at this time. It seems feasible to me that our hospital might be able to furnish practical experience in this area and at the same time utilize the junior college present teaching staff for didactic support.

In addition to this, there is presently a one-year course available in Alabama as well as other states to train school lunch room supervisors. This course in Alabama is under the direction of Miss Louise LeCompte, Institutional Nutrition Consultant, Department of Public Health, State Office Building, Montgomery, Alabama 36104.

On the national level, the American Dietetic Association has developed and administered a very fine training program for F.S.S. funded under a grant from the Kellogg Foundation. This existing program is coordinated by Miss Alice H. Lutkus, Director of the Correspondence Course for Training Food Service Supervisors, The American Dietetic Association, 620 North Michigan Avenue, Chicago, Illinois 60611, and should be reviewed preceding firming up of plans for expanding training of this group.

I would like to suggest that the funding of these existing programs be evaluated as these nation-wide training programs might be the more practical approach to training this group rather than establishing new training programs.

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Food Service Worker

**TARGET SKILL:** Capable of assisting in the processing and preparation of foods for cooking and service to hospital patients.

**PREREQUISITES:** Preferably high school graduate. Must demonstrate ability to read and write English language well enough to perform duties of position

**COURSE LENGTH:** TOTAL 3 Months

(a) Academic 1 Week (VAH)

Academic and practical should be dovetailed

(b) Practical 2 3/4 Months (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** Dietitians set up and coordinate course and act as instructors

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 0

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 10 at a time or 35 per year

(a) Staff See Target Position: Cook

(b) Equipment None

(c) Space Needs See Target Position: Cook

**TUITION OR STIPEND PER TRAINEE:** See Target Position: Cook

**COMPLETION OF COURSE:** Certificate

**SOURCE OF RECRUITMENT:** See Target Position: Cook. Another source might be areas of unemployment

**REMARKS:** Both the cook and food service worker group have traditionally had very little standardization of training requirements in the past. What little training has been required, the bulk has been given through in-service training programs of various levels by individual hospital nursing homes, etc. as well as trial and error methods. Both these methods of training have been administered while the employee is also under pressure to produce. This, of course, is a most wasteful training approach from the standpoint of both manpower, equipment, raw materials and instruction utilization.

No effectively broad or forceful solution, to my knowledge, has yet been initiated to cope with this very real problem on the local hospital and nursing home level. I would suggest that the person assigned to set up

such training utilize the resources of Central Office Dietetics specialist as well as the American Dietetic Association and National Restaurant Association in their planning.

In my opinion, a minimum of 1½ dietitians would be needed to organize, coordinate and pre-plan logical training plans for cooks and food service workers. I would like to suggest that these appointees be placed on the staff of the designated VA training hospital and under the overall supervision of the Chief Dietitian. Such placement would be economical in the long range planning and follow-through as all service members might then be called upon to contribute to the follow-through training in their particular speciality and thus varying instructors.

See attached related "Remarks" for Target Position: Cook



**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Histopathology Technician

**TARGET SKILL:** Capable of preserving and preparing tissue on slides with routine and special histochemical stains for the pathologist's examination

**PREREQUISITES:** High school graduate

**COURSE LENGTH:** Total 12 Months

(a) Academic 12\* Months (University Hospital and VAH)

(b) Practical 12\* Months (University Hospital and VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 0

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 4

(a) Staff One instructor (Histopathology Technician)

(b) Equipment 0

(c) Space Needs Additional classroom needed (may be able to use classroom used in cytology teaching)

**TUITION OR STIPEND PER TRAINEE:** GS-2

**COMPLETION OF COURSE:** Eligible for ASCP Registry

**SOURCE OF RECRUITMENT:** Local or student may be sent from small hospitals for training throughout state

**REMARKS:** A need exists for well trained histopathology technicians with the increase in number of hospitals. Many Hill-Burton facilities are supporting pathologists who need this technical employee

\*Academic and practical training will be interspersed throughout training period

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Inhalation Therapist

**TARGET SKILL:** To be able to perform duties as an Inhalation Therapist in a pulmonary function unit

**PREREQUISITES:** High school

**COURSE LENGTH:** Total 24\* Months

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

<b>NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)</b>	<u>8</u>
<b>NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)</b>	<u>20</u>

(a) Staff                      None

(b) Equipment                None

(c) Space Needs              Classroom (400 sq. ft.), laboratory space (240 sq. ft.), and 200 sq. ft. of storage space

**TUITION OR STIPEND PER TRAINEE:** GS-2, GS-3

**COMPLETION OF COURSE:** Certified as an American Inhalation Therapist by Registry of I. T.

**SOURCE OF RECRUITMENT:** Local and from small hospitals throughout State

**REMARKS:** The pulmonary function units in the Birmingham area (University Hospital, VA, and Spain Rehabilitation Center) are very active due to 24.7% of all admissions to the Medical Center carry a pulmonary diagnosis plus an active thoracic service and many tuberculosis beds. The requirements for additional trained personnel are increasing at a rapid rate.

\*The training will be equally divided between University Hospital and VA in both the academic and practical training

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Laboratory Assistant

**TARGET SKILL:** Capable of performing duties in a clinical laboratory, performing routine tests, venipuncture, making media, etc.

**PREREQUISITES:** Preferably high school graduate. Must demonstrate ability to read and write the English language necessary to accomplish the duties and follow instructions

**COURSE LENGTH:** Total 12 Months

(a) Academic 6 Months (University Hospital)

(b) Practical 6 Months (University Hospital, VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 10

**NUMBER OF TRAINEES PER COURSE WITH ADDITIONAL SUPPORT)**

(a) Staff 0

(b) Equipment 0

(c) Space Needs 0

**COMPLETION OF COURSE:** Certificate

**SOURCE OF RECRUITMENT:** Local

**REMARKS:** See attached information.

**Laboratory Aids (Suggested title change: Laboratory Assistant) and Laboratory Technician (Suggested title change: Clinical Laboratory Technician)**

## **1. PRESENT STATUS**

The training program for laboratory assistants is for 12 months and qualifies the student for taking the certification examination of the Board of CLA of the ASCP and ASMT. Prerequisite is high school diploma. Preference is given to students who have had a course in high school Chemistry.

The program has a capacity of ten students. Although since its inception in 1962, the average enrollment has been five students per year, the current class is eight. The program is expected to reach and maintain capacity enrollment from now on.

The student's time is allotted six months didactic (formal) course work including lecture and student lab sessions and six months clinical experience.

## **2. SHORTAGE**

The combined enrollment of the two schools in Alabama approved by the Board of CLA does not exceed 20. The national need is estimated as 100,000 by 1975. In Alabama the estimate is one Laboratory Assistant per 3 M.T. (ASCP). On this basis the current need is 200 in this state.

## **3. OUTLOOK**

Two factors to be considered in the training of laboratory workers at the sub baccalaureate level are the development of a Technical Institute in the Medical Center and the interest of the Junior colleges, particularly Jefferson County Junior College, in this area of para-medical education. It is possible that two sub bachelor's degree levels of technicians (L.A.s and C.L.T.s) are needed in the laboratory. The optimum staffing pattern has not yet evolved. Until this becomes more clearly defined we would make no recommendation for changing our program at this time.

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**RETRAINING**

**TARGET POSITION** Licensed Practical Nurse

**TARGET SKILL:** Capable of assisting the professional nurse in giving nursing care, including selected medications.

**PREREQUISITES:** Current license to practice of Practical Nursing in the State of Alabama

**COURSE LENGTH:** Total 12 Weeks

(a) Academic 3 Weeks (VAH)

(b) Practical 9 Weeks (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** VAH

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 0

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 10

(a) Staff Instructor and part-time clerk-typist

(b) Equipment Instructional materials, audio-visual aids

(c) Space Needs Office space and equipment

**TUITION OR STIPEND PER TRAINEE:** Equivalent to prevailing minimum wage

**COMPLETION OF COURSE:** Certificate

**SOURCE OF RECRUITMENT:** Membership of Practical Nurse Registry and Official Nurse Registry, State Employment Service, Inactive Licensed Practical Nurses of the community



**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Medical Records Technician

**TARGET SKILL:** Certified Records Technician to perform technical duties in a Medical Records Library

**PREREQUISITES:** High school and/or junior college level

**COURSE LENGTH:** Total 24\* Months

(a) Academic \* Months

(b) Practical \* Months

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** Combination at University Hospital and VAH, and college of general studies

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 0

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 10

(a) Staff One additional Medical Records Librarian  
One additional staff (ART or similar employee)

(b) Equipment Visual Aids

(c) Space Needs Classroom (400 sq. ft.) Laboratory space

**TUITION OR STIPEND PER TRAINEE:** GS-2

**COMPLETION OF COURSE:** National Registry

**SOURCE OF RECRUITMENT:** Local

**REMARKS:** This is a much needed position in that these personnel are able to relieve the MRL of detailed tasks that would provide more time for professional duties.

\*Based at VA with affiliation with University Hospital and College of general studies for academic training.

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Medical Secretary

**PREREQUISITES:** High school with typing

**COURSE LENGTH:** Total 12\* Months

(a) Academic \* Months (VAH)

(b) Practical \* Months (University Hospital, VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 0

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 20

(a) Staff One coordinator for training

(b) Equipment Secrephone/\$600 (typewriters furnished by technical institute)

(c) Space Needs Classroom, 400 sq. ft.

**TUITION OR STIPEND PER TRAINEE:** GS-1

**COMPLETION OF COURSE:** Certificate

**SOURCE OF RECRUITMENT:** Local

**REMARKS:** This training would provide effective ward support for patient care. The MRL area would support the training in conjunction with the associated schools.

**\*Combined academic and practical training would be received through associated schools**

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Nursing Assistant

**TARGET SKILL:** Capable of assisting the professional nurse in performing duties related to patient care which do not involve professional knowledge and skills

**PREREQUISITES:** High school graduate or attained passing score on Alabama General Educational Development Test (GED) or Civil Service Examination

**COURSE LENGTH:** Total 12 Weeks

(a) Academic 3 Weeks (VAH)

(b) Practical 9 Weeks (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** Veterans Administration

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 16

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 25

(a) Staff One instructor

(b) Equipment Share those already suggested for professional nurse trainees

(c) Space Needs Share those already suggested for professional nurse trainees

**TUITION OR STIPEND PER TRAINEE:** Prevailing minimum wage

**COMPLETION OF COURSE:** Certificate

**SOURCE OF RECRUITMENT:** Neighborhood Youth Corps; State Employment Service; Local public schools; Bureau of Public Assistance, Counseling and Employment Division; Hospital Volunteers; Civil Service rolls

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Occupational Therapy Assistant

**TARGET SKILL:** Capable of assisting the professional therapist in performing the full range of occupational therapist duties which do not require professional knowledges and skills

**PREREQUISITES:** High school graduate

**COURSE LENGTH:** Total 12 Months

(a) Academic 0 Months

(b) Practical 12 Months (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 1

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 4

(a) Staff One OTR and one O.T. Aide with carpentry experience

(b) Equipment Complete setup for T.B. Clinic and additional ADL equipment

(c) Space Needs T.B. Clinic and ADL Clinic (small)

**TUITION OR STIPEND PER TRAINEE:** GS-3

**SOURCE OF RECRUITMENT:** Local high schools

**REMARKS:** The University of Alabama has no School of Occupational Therapy. Therefore, no credit for academic training can be given leading to any type of certification, other than a VA statement that the trainee has completed the "on-the-job" course and has had one year's experience as an occupational therapy assistant.

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Pharmacy Assistant

**TARGET SKILL:** Capable of performing non-professional duties in a hospital pharmacy. Usually includes such tasks as bulk compounding of routine and simple pharmaceuticals, unpacking and sorting drugs, stocking, etc.

**PREREQUISITES:** High school graduate

**COURSE LENGTH:** Total 12 Months

(a) Academic 0 Months

(b) Practical 12 Months (VAH on-the-job with special instruction in specific areas)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 1

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** Same

**TUITION OR STIPEND PER TRAINEE:** GS-2

**COMPLETION OF COURSE:** Certification

**SOURCE OF RECRUITMENT:** Local or may be sent for training from other areas.

**REMARKS:** Medical is forcing many small hospitals and nursing homes to obtain the services of a pharmacist where they had none before. In time this will result in a shortage of hospital pharmacists. We believe that the answer to this is to train qualified pharmacy assistants to relieve the pharmacists of many non-professional duties.



**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Pump Oxygenator Technician

**TARGET SKILL:** All duties involved in operating the oxygenator pump during surgery

**PREREQUISITES:** Junior College

**COURSE LENGTH:** Total 12 Months

(a) Academic \*        Months (University Hospital)

(b) Practical \*        (University Hospital)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** University Hospital

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 2

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 4

(a) Staff Two additional technicians

(b) Equipment Additional pump equipment (\$25,000)

(c) Space Needs One additional operating room equipped with pump equipment

**TUITION OR STIPEND PER TRAINEE:** GS-2

**COMPLETION OF COURSE:** Qualified to operate perfusion equipment during heart surgery

**SOURCE OF RECRUITMENT:** Local

**REMARKS:** The activity of heart repair operations in this Center is at a maximum level with present trained personnel. More perfusion trained technicians are necessary to extend this vital operation.

\*The academic teaching will be given during the practical application of the training

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**RETRAINING**

**TARGET POSITION** Radiology Technician

**TARGET SKILL:** Retraining former technicians to operate x-ray equipment and accessories of such equipment for taking and processing x-rays for diagnostic technical work

**PREREQUISITES:** Previous training and/or experience as radiology technician

**COURSE LENGTH:** Total 2 Months

(a) Academic 0 Months

(b) Practical 2 Months (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** None

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 0

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 2

(a) Staff One GS-6 Medical Radiology Technician, \$5,867 per year

(b) Equipment Books and technical charts, \$200

(c) Space Needs 0

**TUITION OR STIPEND PER TRAINEE:** GS-3 trainee, \$4,269 per year

**SOURCE OF RECRUITMENT:** Unknown

**REMARKS:** It is felt that a minimum of 8 weeks would be required to retrain technicians in all aspects of diagnostic radiology. Five training courses could be given each year

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Radiology Technician

**TARGET SKILL:** Capable of operating x-ray equipment and accessories of such equipment for taking and processing the usual x-rays for diagnostic and therapeutic technical work

**PREREQUISITES:** High school graduate

**COURSE LENGTH:** Total 24 Months

(a) Academic 24\* Months (University Hospital)

(b) Practical 24\* Months (University Hospital, VAH, and Children's Hospital or Crippled Children's Hospital)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** University of Alabama School of Radiological Technicians

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 44  
**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 64

(a) Staff	Instructor with B.S. degree	- \$7500 per year
	Secretary	- \$4200 per year
	File Clerk	- \$3600 per year
	<b>TOTAL</b>	<b>\$15,300 per year</b>

(b) Equipment For classroom, laboratory, 3 offices, library-study hall, storage room

**TOTAL COST** \$45,452

(c) Space Needs Classroom, laboratory, 3 offices, library-study hall, storage room

**TOTAL SQUARE FEET** 2,028

**TUITION OR STIPEND PER TRAINEE:** Meals-laundry furnished trainee at cost of \$1986 per 2 years. Stipend paid trainee last 12 months (\$75 per month) \$900 per year

**COMPLETION OF COURSE:** Trainee is eligible to write examination of American Registry of Radiologic Technologists

**SOURCE OF RECRUITMENT:** High schools

**REMARKS:** Trainee receives 44 semester hours credit during 24 months of school. The total cost for increasing from 44-64 trainees would cost \$98,612 in addition to space requirements.

The American Registry of Radiological Technologists is recognized by the American Medical Association and the American College of Radiology.

\*Academic and practical training are interspersed throughout training period

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Research Technician (Hematology)

**TARGET SKILL:** Assist professional and higher technical personnel in carrying out research in the hematological laboratory in duties as related to specific projects

**PREREQUISITES:** High school

**COURSE LENGTH:** Total 12 Months

(a) Academic 3 Months

(b) Practical 9 Months

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** Hematology, Professional and Technical

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 1

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 5

(a) Staff One technologist

(b) Equipment 4 Microscopes and related hematological equipment  
1 Spectrophotometer D.U.

(c) Space Needs Laboratory space, 400 sq. ft.

**TUITION OR STIPEND PER TRAINEE:** GS-2

**SOURCE OF RECRUITMENT:** Local

**REMARKS:** The increased studies on blood diseases have opened additional areas of medical research in this specific field. Presently the number of well-trained technologists is insufficient to meet the demands. This technically trained person could supplement the research work tremendously.

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

TARGET POSITION Speech Pathologist Associate

**TARGET SKILL:** Capable of assisting professional Speech Pathologist in the rehabilitation of patients with impaired speech patterns

**PREREQUISITES:** Two years college and/or equivalent

**COURSE LENGTH:** Total 12\* Months

(a) Academic \* Months (VAH)

(b) Practical \* Months (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:**

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 0

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 5

(a) Staff                      One additional staff Speech Pathologist  
                                    One Secretary

(b) Equipment                Dictaphone, transcriber, typewriter, files  
                                    Audio-visual aid material

(c) Space Needs              One classroom

**TUITION OR STIPEND PER TRAINEE:** GS-2, GS-3

**COMPLETION OF COURSE:** Qualified for position in any speech program with qualified director

**SOURCE OF RECRUITMENT:** Local

**REMARKS:** Additional academic courses (according to needs) would be afforded this trainee along with the practical application of training. There is a great need for this type personnel (increased stroke victims) to assist the professional people in retraining patients with speech problems.

\*Academic and practical training will be interspersed throughout training period



SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF  
HEALTH SERVICE PERSONNEL - P. L. 89-785

TARGET POSITION Speech Pathology Aid

TARGET SKILL: To carry out technical duties related to rehabilitation of patients with speech impairments

PREREQUISITES: High school and/or equivalent

COURSE LENGTH: Total 12\* Months

(a) Academic \* Months (VAH)

(b) Practical \* Months (VAH)

SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:

NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES) 2

NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT) 5

(a) Staff\*\*

(b) Equipment\*\*

(c) Space Needs\*\*

TUITION OR STIPEND PER TRAINEE: GS-2

SOURCE OF RECRUITMENT: Local

REMARKS: This would be a technical aid trained to assist the associate and Speech Pathologist in handling equipment and patients in speech restoration programs.

\*The training would be mostly practical with some classroom work of lectures, demonstrations, etc.

\*\*The same support used in teaching the associate level would suffice for this category of trainees.

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Student of Basic-Nursing Program

**TARGET SKILL:** Capable of performing all patient care duties and professional nurse responsibilities assigned to staff ward nurse.

**PREREQUISITES:** High school graduate

**COURSE LENGTH:** Determined by educational institution

(a) Academic - Determined by educational institution (University Hospital and other)

(b) Practical - Determined by Educational institution (VAH)

**SOURCE OF PRACTICAL EXPERIENCE:** VAH

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** dependent upon objectives

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** of academic program

(a) Staff Coordinator, part-time clerk-typist, dependent upon number of programs

(b) Equipment Office equipment

(c) Space Needs Office for Coordinator

**TUITION OR STIPEND PER TRAINEE:** Not applicable

**REMARKS:** The patient care program at this agency could afford clinical experience in general medical-surgical nursing and a variety of specialties; however, the length and content of the academic program and the number of trainees that could be accommodated would largely depend upon the objectives of the educational institution

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** Surgical Assistant

**TARGET SKILL:** Learn basic sterile field and suture technique, learn principles of closing surgical incisions and knowledge of intravenous fluid therapy

**PREREQUISITES:** Two years college (minimal)

**COURSE LENGTH:** Total 12 Months

(a) Academic 12\* Months (University Hospital, VAH)

(b) Practical 12\* Months (University Hospital, VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** Both institutions

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 2

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 5

(a) Staff One additional surgeon (coordinator-instructor)

(b) Equipment None

(c) Space Needs None

**TUITION OR STIPEND PER TRAINEE:** GS-2, GS-3

**SOURCE OF RECRUITMENT:** Local junior college

**REMARKS:** Two students could be started training now without additional support. Five may be trained (in the subspecialties and utilizing Children's Hospital) with one physician to support training time.

\*The academic and practical would be given by staff surgeons at both institutions

**SURVEY OF POTENTIAL FOR TRAINING AND EDUCATION OF**  
**HEALTH SERVICE PERSONNEL - P. L. 89-785**

**TARGET POSITION** X-Ray Film Processor

**TARGET SKILL:** Capable of operating x-ray film processing equipment to produce quality film reproduction, and care and preventive maintenance of automatic processing equipment

**PREREQUISITES:** High school graduate

**COURSE LENGTH:** Total 3 Months

(a) Academic 0 Months

(b) Practical 3 (VAH)

**SOURCE OF ACADEMIC (DIDACTIC) EDUCATION:** None

**NUMBER OF TRAINEES PER COURSE (PRESENT FACILITIES)** 0

**NUMBER OF TRAINEES PER COURSE (WITH ADDITIONAL SUPPORT)** 1

(a) Staff One GS-6 Medical Radiographic Technician, \$5,867 per year

(b) Equipment None

(c) Space Needs None

**TUITION OR STIPEND PER TRAINEE:** GS-2 trainee salary, \$3,925 per year

**SOURCE OF RECRUITMENT:** Civil Service Registers - transfers from other divisions and/or services

**REMARKS:** The technician selected to train the x-ray film processor must be sent to the Pako User School in Minneapolis, Minnesota. The training is free; however, travel and per diem would cost approximately \$300.00.

EXHIBIT  
NO. 5



**EXHIBIT NO. 5**

- a. Memorandum from Mr. Clyde G. Cox announcing the study.
- b. Letter from Dr. S. Richardson Hill, Dean of the University of Alabama Medical College, Birmingham.
- c. Memorandum from Chief, Medical Service, VA Hospital, Birmingham, Alabama.
- d. Letter from Dr. John W. Kirkland, Professor and Chairman, Department of Surgery, University of Alabama Medical College, Birmingham.
- e. Memorandum from Dr. Charles H. Lupton, Jr., Professor, Department of Pathology, University of Alabama Medical College, Birmingham.

**UNITED STATES GOVERNMENT**

**Office Memorandum**

**TO:**

**January 10, 1967**

**FROM: Director, VA Hospital**

**SUBJ: VA Ad Hoc Committee - COTH**

1. A Veterans Administration Ad Hoc Committee has been named to develop ideas and plans whereby implementation of the following programs in VA affiliated hospitals may be assisted through our institutional membership in the Council of Teaching Hospitals of AAMC.

a. Implementation of program for training and education of Health Service Personnel - Dr. Stetson and Mr. Cox.

b. Sharing of Medical Facilities, Equipment and Information - Drs. Chase, Sterne, Lukens

c. Coordination with programs under Heart Disease, Cancer, Stroke, Amendments 1965 - Regional Medical Centers - Dr. Lukens, Messrs. Cox and Anton

d. Cost Analysis Study - Committee at Large

2. Members of the committee consist of Hospital Directors and Chiefs of Staff of four VA Hospitals. These hospitals are affiliated with University Schools of Medicine at Yale, Pittsburgh, Cincinnati, and University of Alabama-Birmingham. Coordination of plans of the committee with COTH will be handled by Mr. Dan Macer, Director, VA Hospital, Pittsburgh, Pennsylvania, who is a member of the Executive Committee - COTH. Within this frame of reference, I have been given assignments a and c as indicated above.

3. Suggested possible plans for approach to the above involving this VA Hospital have been requested for presentation in a meeting with Dr. Engle and Dr. Wells tentatively scheduled for February 15-16, 1967.

4. Major involvement of this hospital with future Medical Center programs can occur under the new legislation providing a legal basis for education, training, retraining and the sharing of facilities. Pertinent information will require the assistance of both the interested faculty and the key VA staff.

5. This is furnished for your information. Contacts with individuals who may assist in this will be made in the near future.

**C. G. COX**

**Encl.**

**Memo dated 12-30-66**

**Enclosure**

Memorandum dated December 30, 1966 to Ad Hoc Committee - COTH, from Mr. Dan J. Macer, Director, VA Hospital, Pittsburgh, Pennsylvania, subject, Activity Report.

"1. Thanks to hospitality and leadership of Mr. L. H. Gunter at Cincinnati, the groundwork was laid for meaningful and constructive participation on the Executive Committee of COTH.

"2. The next meeting is January 11 and 12, 1967 for the Executive Committee-COTH, followed by an invitation to the Committee to participate as representatives of AAMC in a NEW Regional Medical Planning Meeting, January 15-17, 1967. I do not as yet have the agenda of these meetings but will call you for comments as soon as the agendas are in hand. It is my understanding, however, that they will be principally organizational meetings and that the initial agenda will be on this plane. You have been furnished under separate cover the Report of Pilot Study of Hospital Program Costs and your comments will be appreciated.

"3. I believe the report is an excellent introductory discussion. The pages of definition should adequately set the stage for the analyst who directs his energy toward a specific problem. I believe this academic direction can eliminate many errors in computing program costs by recognizing and defining the differences between Hospital Cost Accounting and Hospital Program Cost Funding. This provides the proper setting for better understanding of who "cost centers" fail to meet our needs.

"These definitions and criteria are, however, essentially abstract and the extent of agreement or discrepancy in their use remains to be determined. The next parts of the study should permit us to analyze a selected program and clarify criteria for future studies and use in VA Hospitals.

"4. I am attaching copy of current activities previously furnished to you in Cincinnati. Paragraph 5 b.7 pointed out Study Groups for Program Content and Priority Approach for COTH. It was in this relationship that the following responsibilities were accepted.

"a. Implementation of program for training and education of Health Service Personnel - Dr. Stetson and Mr. Cox.

"b. Sharing of Medical Facilities, Equipment and Information - Drs. Chase, Sterne, Lukens.

"c. Coordination with programs under Heart Disease, Cancer, Stroke, Amendments 1965 - Regional Medical Centers - Dr. Lukens, Messrs. Cox and Anton.

"d. Cost Analysis Study - Committee at Large.

"5. The new legislation thrusts the VA even more vigorously into the main stream of education. These subjects will undoubtedly be discussed on January 11 and 12, 1967 and I need your preliminary thoughts at this time. Will you please coordinate on these subjects and call me prior to January 10, 1967, if possible. I will coordinate with Dr. Wells and have Central Office's latest thinking.

"6. I will be advising you of future meeting schedules and hope that we can all meet for further discussions in Washington during the month of February. You will receive full report of the meetings - January 11 and 12, 1967 and January 15-17, 1967."

/s/ Dan  
DAN J. MACER

**THE UNIVERSITY OF ALABAMA  
MEDICAL CENTER  
Medical College of Alabama  
Birmingham, Alabama 35233  
January 30, 1967**

Office of the Dean

**M E M O R A N D U M**

**TO: Mr. Clyde G. Cox**

**FROM: Dr. S. Richardson Hill, Jr.**

Clyde,

Thank you very much for your letter of January 24th concerning the ad hoc committee of the VA for implementation of the provisions of Training and Education of Health Service Personnel (HR 11631). The questions you have proposed are most important and should receive the attention of many of our faculty members. I will bring this up at our next VA Deans Committee Meeting and ask specifically Drs. Frommeyer, Kirklin, Lupton, Straumfjord, and Roth for their own suggestions.

I, personally, believe that a joint local University VA committee should be set up to coordinate this major health training and educational development. The Birmingham VA Hospital, along with the Tuskegee Hospital and perhaps the VA Hospitals in Montgomery and Tuscaloosa, could and should be utilized as major resources for these training purposes. The Birmingham facility could, for example, be the core educational facility, training people for satellite educational programs in the other VA hospitals. Funds would, of course, be needed for construction of teaching facilities and support of faculty and equipment. It seems to me it would be a very simple matter to extend our training programs in the area of medical technology of all types, radiological technology, physical and occupational therapy, prosthetics, nursing, nurse anesthetists, specialized coreman type individuals for specific employment in operating rooms, intensive care units, monitoring units, open heart surgery units, etc. These are but a few examples of possible joint programs.



Would it be helpful for you and me to get together with Jean Morgan, Charlie Winkler, Jon Straumfjord, Bob Roth, John Kirklin, and Matt McNulty's representative in the School of Health Services Administration to discuss this matter and hopefully develop a creative plan of approach?

SRHJr/ss

cc: Dr. J. F. Volker

**UNITED STATES GOVERNMENT**

**Office Memorandum**

**TO: Director (00)**

**2/6/67**

**FROM: Chief, Medical Service (111)**

**SUBJ: Plans for implementation of H. R. 11631**

1. Many thanks for your memorandum of January 24, 1967, regarding the plans for implementation of H. R. 11631. I recently discussed this overall problem with Mr. Love and Mr. Junkin and have given them my thoughts about several areas in this regard. Specifically, I think that we could contribute considerably in the training of cardiology technicians, inhalation therapists, research technicians, nursing assistants, dietary assistants, ward secretaries and medical technologists.

2. In this regard I would like to first point out that many duties within a hospital can be performed very adequately by individuals who do not have college degrees or extensive periods of formal training. It is my personal feeling that we have probably interfered with adequate nursing care of patients by insisting that our registered nurses have such extended periods of training and also in encouraging degrees in nursing, etc. These individuals probably would be quite helpful in the teaching program but their orientation by the time they have finished their training is really many times directed away from actual nursing or the bed care of the patient. Furthermore, after extensive college training and long exposure to the classroom many individuals are no longer challenged by the somewhat mundane, day to day care of the patient, and, as a matter of fact, I have a feeling that many nurses feel that they are really operating below their ability and their training when they become engaged in the menial care of the patient, such as giving the patient a bath, an enema, carrying the bed pan, carrying food trays, taking temperatures, giving routine injections, etc.

3. By the same token, I have been impressed by the interest, the enthusiasm, and the challenge that some of these duties present to a bright, energetic, but not particularly well-trained aid who comes into the hospital to start work. Thus, I am suggesting not that we replace the RN but that we give serious thought to developing individuals with less background and less formal training for participation in the hospital in various specific positions for which they will receive pin-point specialized training. Naturally, this would cut down considerably on the flexibility of many hospital personnel because if we train an individual specifically as a cardiology technician it is not likely that we can, because of the shortage on another ward, be able to use this individual as a nursing aid, nursing assistant, dietary aid, etc. Yet, I have the distinct feeling

that we can recruit many more individuals into the Health Care areas by recruiting from the group with less formal training than is demanded by the current nursing schools, medical technology schools, etc. As a matter of fact, I have demonstrated very clearly that I have been able to take an individual, with a high school education, who accepted a job in our laboratory as a dishwasher, and converted this individual into a very capable technician who performs specific tests for which she has been trained. As a matter of fact, I was very interested to find that one of these individuals who had been converted from dishwasher status was so thrilled with the idea that she could do blood sugars as a technician that time after time we found that she came through with the most accurate and reproducible results of anyone in the laboratory. Thus, what I am saying is that to her this was a challenge; this was something new; something interesting and provided her the opportunity to do something which was more ego satisfying than washing dishes. Although she is only performing a few laboratory procedures, such as blood sugars, NEFAs, etc., this to her is a challenge but to the average medical technologists the simple procedure of doing blood sugars is really no longer interesting. It is considered scut work and oftentimes performed rather sloppily.

3. Now, for more specific plans, I would suggest that we first of all consider re-organizing our total medical service in order to provide a more adequate teaching atmosphere. Actually, our wards are not designed for teaching. We have inadequate space for the students and housestaff to examine patients; inadequate desk space for the write-ups to be performed; and inadequate conference and teaching rooms for consultation and teaching rounds to be held. Furthermore, 40 patients are by no means the optimal number for the ward unit consisting of one resident, two interns, and a complement of medical students. I would suggest that the 40-bed units on medicine be converted into 32-bed units and that we establish a first-rate, compact, small clinical laboratory on each of the four wards. In addition, I would have a treatment and examination room where sigmoidoscopies and other procedures of this type could be performed in a more ideal atmosphere. Furthermore, I would have a definite classroom on each floor large enough for the total group of students, housestaff, etc., assigned to a ward to meet with their consultants and attending men for discussions. These classrooms should be furnished with view boxes, projectors, audiovisual aids, blackboards, etc., which could improve the quality of our teaching program.

4. I would plan to assign a laboratory technician, probably initially only on a half time basis, to the clinical laboratory that is established on each ward. My reason for doing this is as follows:

- a. It is not possible to keep this laboratory clean and well stocked with supplies without having a permanent individual in charge.

b. Many procedures, such as CBC, urinalysis, examination of spinal fluid, pleural fluid, ascitic fluid, should be performed as soon as possible after than specimen is collected from the patient. If the small clinical laboratory was available on each ward and a well trained, interested technologist assigned to this area valuable consultation would be available to the students and housestaff in the proper collection, handling, and preparation of these various specimens for examination. This would markedly cut down on the need for repeating tests.

In addition, it would give the ward personnel the opportunity to benefit not only from getting the results back very quickly but also give them the opportunity to actually view abnormalities in many specimens, including especially blood smears, urine sediments, and spinal fluids. We find that our students and housestaff are not adequately trained in clinical pathology; thus, I would suggest that the technicians assigned to this laboratory directly on the ward would actually be involved in the continuing education process as it relates to clinical pathology, from which the medical students, the intern, the resident and attending men would benefit. In addition, trainees or students in medical technology could be assigned for some of their practical laboratory work in these areas.

5. Furthermore, I would like to suggest that two full-time faculty be assigned to the Department of Medicine at the Birmingham VA Hospital with the sole responsibility being that of participating in the teaching program. Natrually, I would suspect that we would get the calibre of individuals who would desire to spend a small amount of their time in clinical research and perhaps other activities in the Medical School but predominantly they would be paid to set up, direct, evaluate and participate in the overall teaching program not only for medical students, interns, and residents, but also for the other paramedical personnel.

6. In addition, I believe that we could convert our admitting and outpatient areas into a much more effective teaching arrangement that would be conducive to the training of medical students and housestaff and by the same token provide a much better calibre of medical care and evaluation to the applicant who is desirous of admission into the hospital. This would involve first of all redesigning the total admitting area whereby adequate office space would be available for the use of the resident, full-time faculty, and the students assigned to this area. It would also be necessary to have a small clinical laboratory similar to that I have suggested for the individual wards in the admitting area. I would then assign a full-time faculty member who is primarily interested in teaching to the admitting area; I would design the clothing room in such a manner that an individual applying for admission would be allowed to come into the cubicle undressed and draped in an examining gown. He would then be placed in the doctor's office and be available for



examination. I would then assign, on a rotating basis, four medical residents or faculty members along with four medical students in the outpatient area. This number of individuals could move the applicants along fast enough to prevent bogging down or slowing up of the admission procedure and could provide a more thorough evaluation of each applicant and by virtue of placing a medical student with a resident or the faculty member would provide an "one on one" teaching situation which I think is still quite important in the process of training young doctors. As a matter of fact, our students and housestaff complain that they do not get adequate exposure to outpatients. Thus, I think that it would not be too difficult to design our VA admitting area to remedy part of this problem.

7. If the VA is really serious about becoming involved in medical education, better care of patients and special programs, such as chronic dialysis, intensive care, emphysema, etc., a much more realistic system of funding must be evolved. When a Medical Service the size of ours can afford only two secretaries for the entire staff, can't even buy a dictaphone for a new staff member (this was actually the case when Dr. Roddam joined us), cannot provide even limited construction costs for an emphysema unit which Central Office suggested we start and cannot provide even enough nurses for single coverage around the clock, then we are in no position to start new programs or to support realistically those that we have. With 200 medical beds we have only seven full-time staff, excluding Drs. Eddleman, who is paid from research and Pittman, who is also responsible for radioisotopes. Thus, in summary, I feel that recognition of actual costs of good medical care and teaching in a Dean's Committee Hospital is a first step before we attempt to take a bigger bite than we are now chewing.

8. I apologize for the rambling nature of this discussion but I would be very pleased to elaborate on the individual points with you at a later date if you care to have me do so.

Buris R. Boshell, M. D.



THE UNIVERSITY OF ALABAMA  
MEDICAL CENTER  
1919 7th Avenue, South  
Birmingham, Alabama 35233  
January 31, 1967

Department of Surgery

Mr. C. G. Cox  
Director  
Veterans Administration Hospital  
Birmingham, Alabama

Dear Mr. Cox:

Thank you very much for your note of the 24th of January. I am delighted to have an opportunity to reflect with you concerning the important matter of the participation of the VA hospital system in such programs.

1. Within my own area of cardiovascular surgery, there is an urgent need for the training of pump oxygenator technicians. We have the basic personnel and clinical material in the University of Alabama Medical Center to have a superb training program for pump oxygenator technicians. We could very easily write down the requirements for entry into such a training program. Two years of a college education is desirable. The length of the program would be somewhere between six and twelve months. I personally would be extremely enthusiastic about setting up such a program at the University of Alabama Medical Center. Some financial support would be necessary if we were to do this. This support would include the stipend of the trainees; and some support to develop a "faculty" for their training. We would need to have another pump oxygenator technician or perhaps two more, if we were to do this.

I mentioned to you once before the possible need for acquiring additional pump oxygenator equipment for expansion of our program of open intracardiac surgery in the Medical Center and the Veterans Administration Hospital. The development of this training program would be an additional stimulus to the procurement of such equipment. For, of course, practice runs and the like would be an important part of the training program. I would think an overall expense of about \$25,000 would be needed for the additional hardware involved. Let me emphasize that this hardware would not be a prerequisite to the training program, but is something that we need to explore as the

months went on. May I say again, however, how enthusiastic I would be concerning the development of such a program. It is of vital importance in my opinion for the future.

2. I am extremely interested in the possibility of training "Surgeon's Assistants". I visualize that individuals with about two years of college education could enter this program. They would have a training program of at least 12 months and possibly 18 months. This program would be intensive and would fit them for many and varied activities as a surgeon's assistant; for example, they could do much of the work that is at presently done in Emergency Departments of community hospitals. They would be taught to sew up minor lacerations and taught to identify clearly those situations requiring the immediate attention of a physician. They could extend the surgeon's ability to care for his patients postoperatively by being extremely conversant with all aspects of the technical management of patients after operation. Here I am not thinking of individuals to act as surgical nurses in the operating room, but rather as individuals to be true assistants to the surgeon. Again, one would have need of a stipend for trainees as well as financial support for individuals engaged in the teaching of those people.

3. It is possible that Dr. Sheridan Shirley may have some thoughts about a similar program for individuals in Urology and Dr. Galbraith or Dr. Clayton Davie might have thoughts about similar programs for Neurosurgery. Possibly Orthopedics would like to develop such a program.

4. The training of nurse anesthetists, of course, is of critical importance for the future in my opinion. The Veterans Administration could possibly make a significant contribution in this area as well.

These are the specific items that come to my mind as being ones that the University of Alabama Medical Center and the Veterans Administration Hospital here could push forward in an aggressive thoughtful fashion. I can assure you of my personal interest in these programs. Let me know if I can be of service to you.

Sincerely,

John W. Kirklin, M. D.  
Professor and Chairman

cc: Dr. Thomas Allen

/mh

**THE UNIVERSITY OF ALABAMA  
MEDICAL CENTER  
Inter-Departmental Correspondence Only**

**TO Mr. Clyde G. Cox**

**February 14, 1967**

**FROM Dr. Charles H. Lupton, Jr.**

**SUBJECT**

I regret the delay in answering your memorandum of January 12th concerning training programs for Health Service Personnel. I believe you know already of our interest in a pathologist assistant program and that Dr. Hathaway has begun already to develop such a program and, in addition, I believe a course for histologic technicians. These will be shared programs between the VA Hospital and the University and, hopefully, will deserve the support of this VA program. Should there be any additional areas in which you feel we can be of assistance please let me know.

**CHLJr:vhw**

